

# ORION

## Operating Instructions

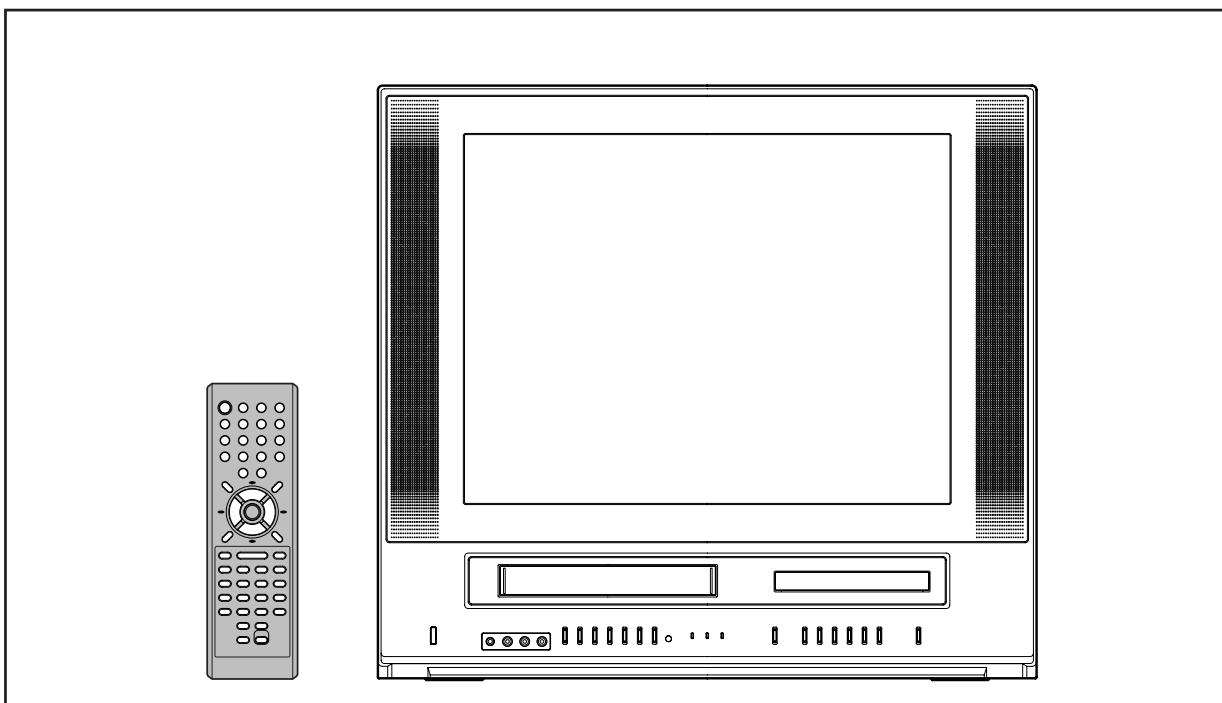
# Combination 21" Flat TV and Video Recorder/DVD Video Player



Region / Region discs only

TELETEXT

21FVD



Before operating the unit, please read this manual thoroughly.

## **IMPORTANT**

Unauthorized recording of copyright television programmes, films, video tapes and other materials may infringe on the rights of copyright owners and be contrary to copyright laws.

## **WARNING**

To prevent fire or shock hazard, do not expose this equipment to rain or moisture.

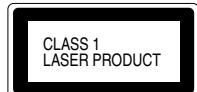
## **MAINS SUPPLY**

This unit is designed to operate from AC 240V 50Hz household mains supply.

## **CAUTION:**

THIS UNIT IS A CLASS 1 LASER PRODUCT. HOWEVER THIS UNIT USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE PLAYER CORRECTLY AS INSTRUCTED.

THE FOLLOWING CAUTION LABEL IS LOCATED ON THE REAR PANEL OF THE UNIT.



WHEN THIS UNIT IS PLUGGED INTO THE WALL OUTLET, DO NOT PLACE YOUR EYES CLOSE TO THE OPENING OF THE DISC TRAY AND OTHER OPENINGS TO LOOK INTO THE INSIDE OF THIS UNIT.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

## **HQ**

This unit is equipped with HQ (High Quality) recording capability. A built-in detail enhancer is used to boost the recorded signal for cleaner, sharper images and maximum picture playback.

# FEATURES

## TV/VCR

- HQ (High Quality)
- TELETEXT Function
- 1 Month, 8 Programme Timer
- One-Touch Timer Recording (OTR)
- 30 Minute Back Up
- Real Time Tape Counter with Zero Return
- NTSC Playback (PAL 60Hz)
- Hi-Fi Stereo
- Picture Control Adjustments
- Slow Motion
- Video Index Search System
- Digital Auto Tracking
- Programmable ON/OFF Timer
- Auto Power On/Auto Play
- Auto Rewind/Auto Eject
- Dual Speed Picture Search
- 2 Speed (SP/LP) Record/ Playback

- On Screen 5 Language Display
- Sleep Timer
- Auto Repeat Play

## DVD Player

- Digital Audio Jack (Coaxial)
- Multi-Language
- Multi-Angle
- Repeat Playback
- Memory/Random Playback
- Zoom
- Video Aspect Ratio
- Parental Control
- Digital output for Dolby Digital (AC-3) and DTS
- Playback of DVD, Audio-CD and MP3/JPEG CD
- PAL & NTSC DVDs playback
- A-B Repeat playback

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# PRECAUTIONS

## MOISTURE CONDENSATION

If the unit is suddenly moved from a cold place to a warm place, moisture may form inside the unit. In this case, do not operate it for two or three hours.

### ■ WHAT IS MOISTURE CONDENSATION?

When cold water is poured into a glass, for example, water vapor in the air will condense on the surface of the glass. This is called moisture condensation.

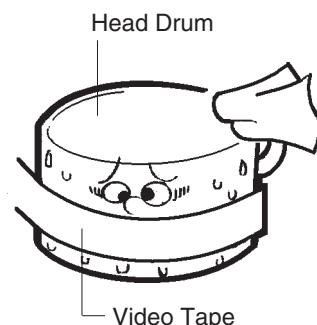
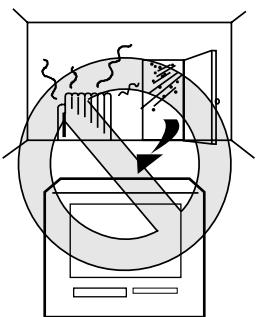
### ■ MOISTURE WILL CONDENSE ON THE UNIT IN THE FOLLOWING CASES;

- When you move the unit from a cold to a warm place.
- After heating a cold room or under extremely humid conditions.

### ■ IF YOU EXPERIENCE THE ABOVE CONDITIONS;

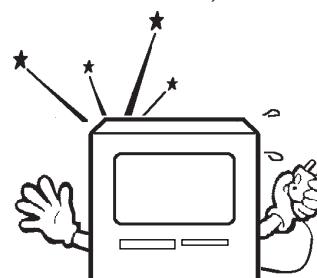
Plug the AC cord to AC outlet, set the Main Power (ON) Switch to ON and leave the unit at the room temperature until moisture condensation disappears.

Depending on the surrounding conditions, this may take two or three hours.

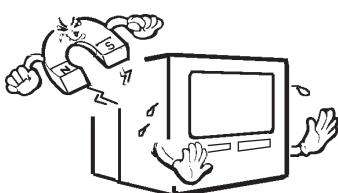


Under certain conditions, such as low humidity or walking across wool carpet, you may experience a static discharge when touching the unit. If this happens and it fails to function, follow the procedure below.

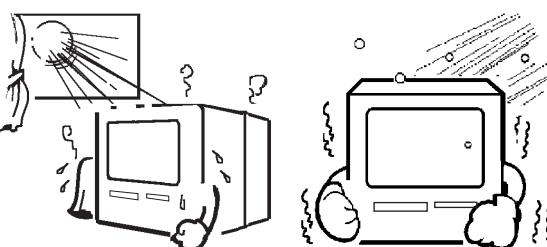
- 1) Un-plug the unit from the AC outlet.
- 2) This may take two or three hours.
- 3) Re-plug the unit again.



Do not place the unit on or near appliances which may cause electromagnetic interference e.g. TV or hi-fi speakers, etc. Doing so may affect operation of unit causing erratic playing or recording, picture or sound distortion, or noise.

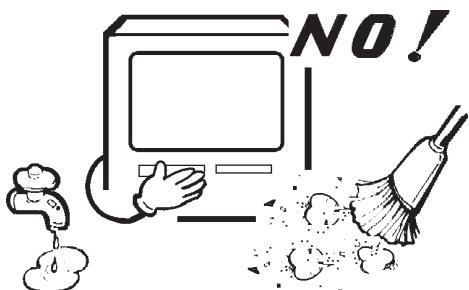


Avoid extreme heat and cold.

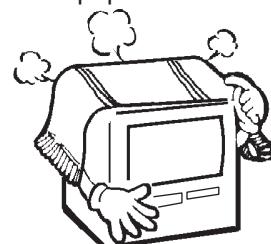


## PRECAUTIONS

Avoid extreme moisture and dust.



The ventilation holes prevent overheating. Do not block or cover these holes. Especially avoid covering the holes with soft materials such as cloth or paper.



Do not insert fingers or any other objects into the cassette loading slot. Do not spray cleaner or wax directly on the unit or use forced air to remove dust.



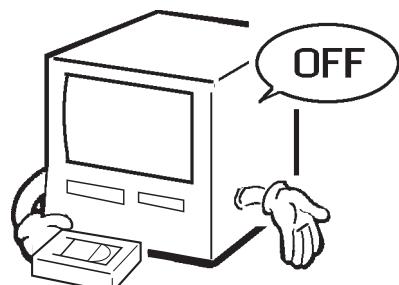
Place the unit on a flat, stable, level surface, and never subject it to violent shaking or any other shock or impact.



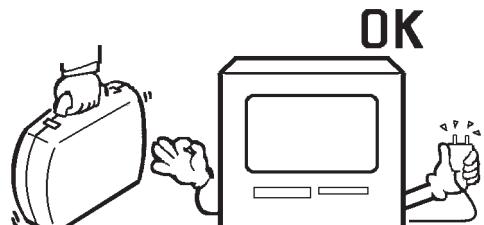
Keep the unit away from flower vases, sink etc. Liquids spilled into the unit can cause serious damages. Switch OFF the Power Supply to the unit and consult a qualified service engineer before attempting to use the unit again.



When you finish operating the unit, always unload the cassette and turn off the power.



When you leave your home for a long period of time, unplug the AC mains lead.

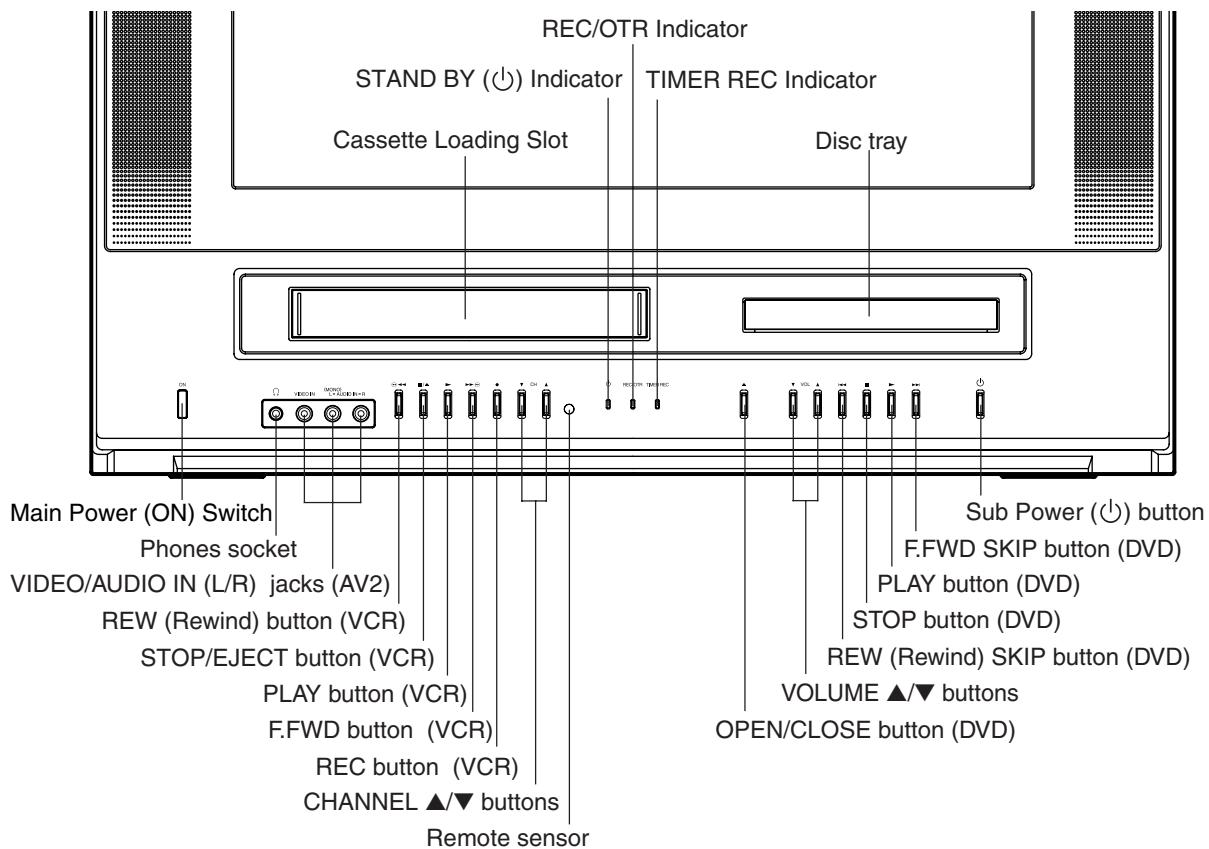


To protect the unit during a thunder storm, unplug the AC mains lead from the wall outlet and disconnect the Antenna.



# LOCATION OF CONTROLS

## Front



### Note for key-operation

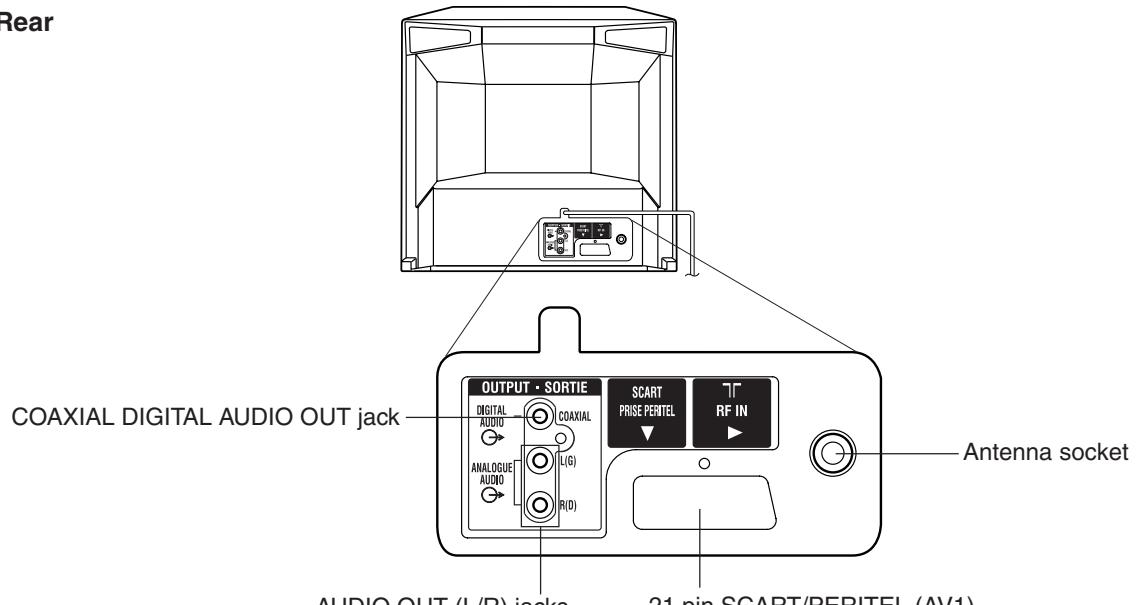
During TV/VCR mode:

- When you press **DVD** **◀◀** or **▶▶** (**SKIP**), the unit switches to DVD SKIP SEARCH mode.
- When you press **DVD** **■** (**STOP**), the unit switches to DVD mode.

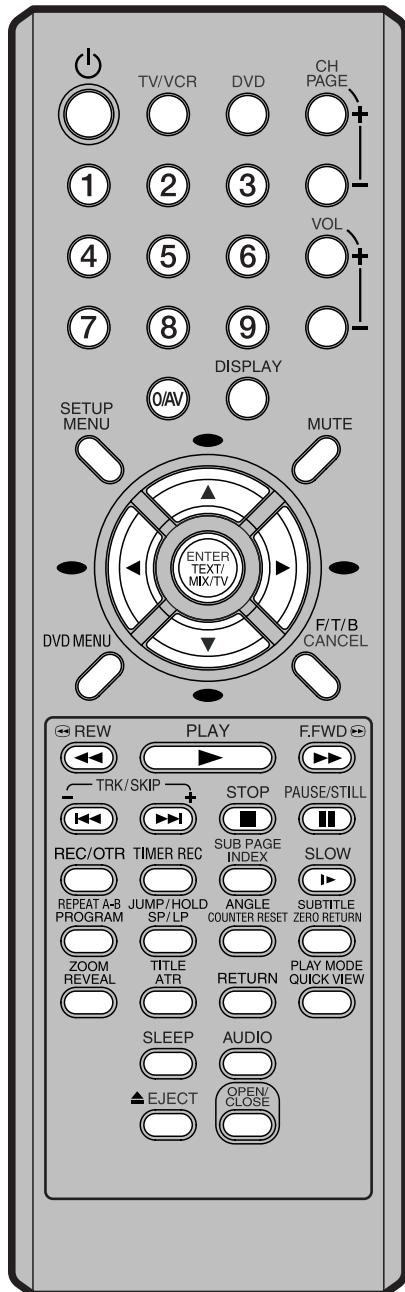
During DVD mode:

- When you press **CH (CHANNEL)** **▲** or **▼**, the unit will switch from DVD to TV/VCR mode.
- When you press **VCR** **▶** (**PLAY**), the unit will switch to VCR mode and play the cassette if one is inserted.

## Rear

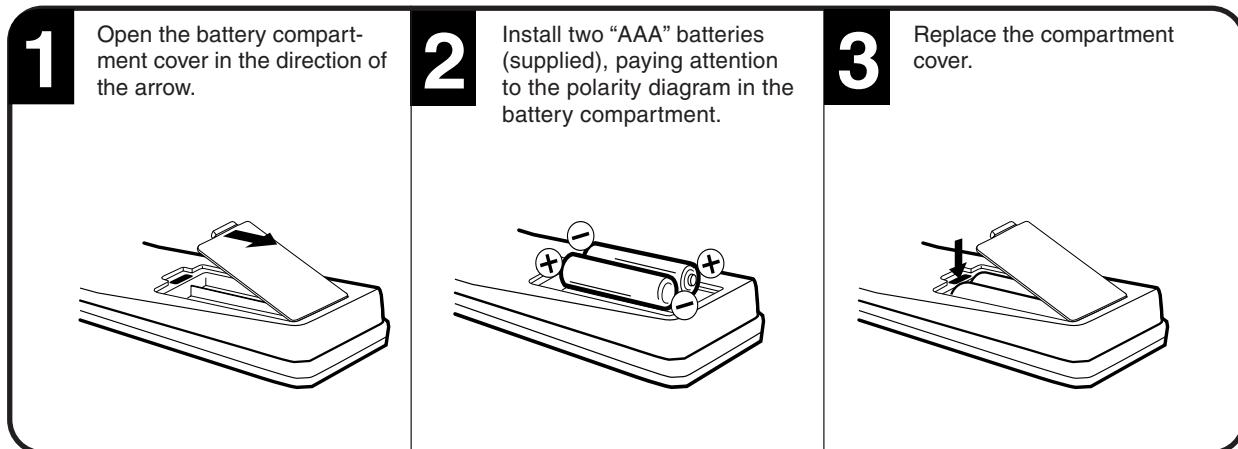


# REMOTE CONTROL



	Page	
POWER	Sub Power on/off	10,15,22,24,27,37
TV/VCR	Select to operate TV/VCR	9,10~14,17~22,24,25,27~31
DVD	Select to operate DVD	33,37,38
CH/PAGE +/-	Select channel of the VCR	16,24
	Utilize the teletext	35
0-9	Direct channel selection of TV	13
	Input setting	30,42,45
	Enter a security code	52,53
AV	Scart Input or Front AV input	9,32
VOL +/-	Volume +/-	15
DISPLAY	Display VCR or DVD operation status	16,28,31,37
▲ / ▼ / ▲ / ▼	Cursor buttons	
Four Coloured buttons	Access the Teletext	34
SETUP MENU	Display the setup menu	10~14,17~19,21,23,25,26,31 38,43,44,50~53,55~57
MUTE	Mute	16
ENTER	Enter information in the menu/Select option in the menu	
TEXT/MIX/TV	Select teletext	34
DVD MENU	Select menu of a DVD disc	42,49
F/T/B	F/T/B	35
CANCEL	Delete Timer program	14,45,47,52,53
	Cancel input data in the setting mode	26
REW	Rewind/Review playback	22,23,40
PLAY	Playback	22,23,39
F.FWD	Fast Forward/Forward search playback	22,23,40
SKIP ▲/▼	Skip chapter to forward or reverse direction	40,42
TRK (TRACKING) -/+	Manual tracking	22
STOP	Stop	22,39
PAUSE/STILL	Still picture/Recording pause on/off	23,24,40
REC/OTR	Recording/OTR	24,27,28,33
TIMER REC	Timer recording On/Off	25
SUB PAGE	Sub page	35
INDEX	Search for INDEX marks	30
SLOW	Slow motion playback	23,40
REPEAT A-B	Repeat playback between A and B (DVD/CD)	46
PROGRAM	Confirmation of Timer-Recording	26
JUMP	Locating desired scene	45
HOLD	Hold	34
SP/LP	Sets the tape speed for recording	24,27
ANGLE	Change playback angle of a DVD disc	49
COUNTER RESET	Reset the counter to 00:00:00	28,29
SUBTITLE	Set Subtitle of a DVD disc	48
ZERO RETURN	Stop the tape when the counter reaches 00:00:00	29
ZOOM	Zoom (for DVD playback)	45
REVEAL	Reveal	35
TITLE	Select title of a DVD disc	49
ATR	Auto tracking	22
RETURN	Remove DVD set up menu	38,43,44,50~57
PLAY MODE	Select playback mode	46,47
QUICK VIEW	Quick view	16
SLEEP	Sleep timer	16
AUDIO	Switches sound between mono and stereo	31
	Change sound track language of DVD	48
▲ EJECT	Eject a cassette tape	20
OPEN/CLOSE	Open or Close the tray	39

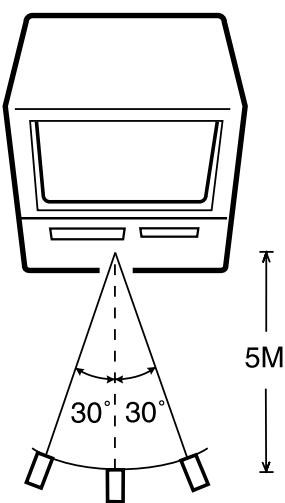
## BATTERY INSTALLATION



## BATTERY CAUTIONS

- Use two "AAA/R03/UM-4" size penlight batteries for the remote control transmitter.
- The batteries may last approximately one year depending on how much the remote control is used. For best performance it is recommended batteries be replaced on a yearly basis, or when remote operation becomes erratic.
- Do not mix old and new batteries.
- Weak batteries can leak and severely damage the remote control transmitter. Always remove batteries as soon as they become weak.

## EFFECTIVE DISTANCE OF THE REMOTE CONTROL TRANSMITTER

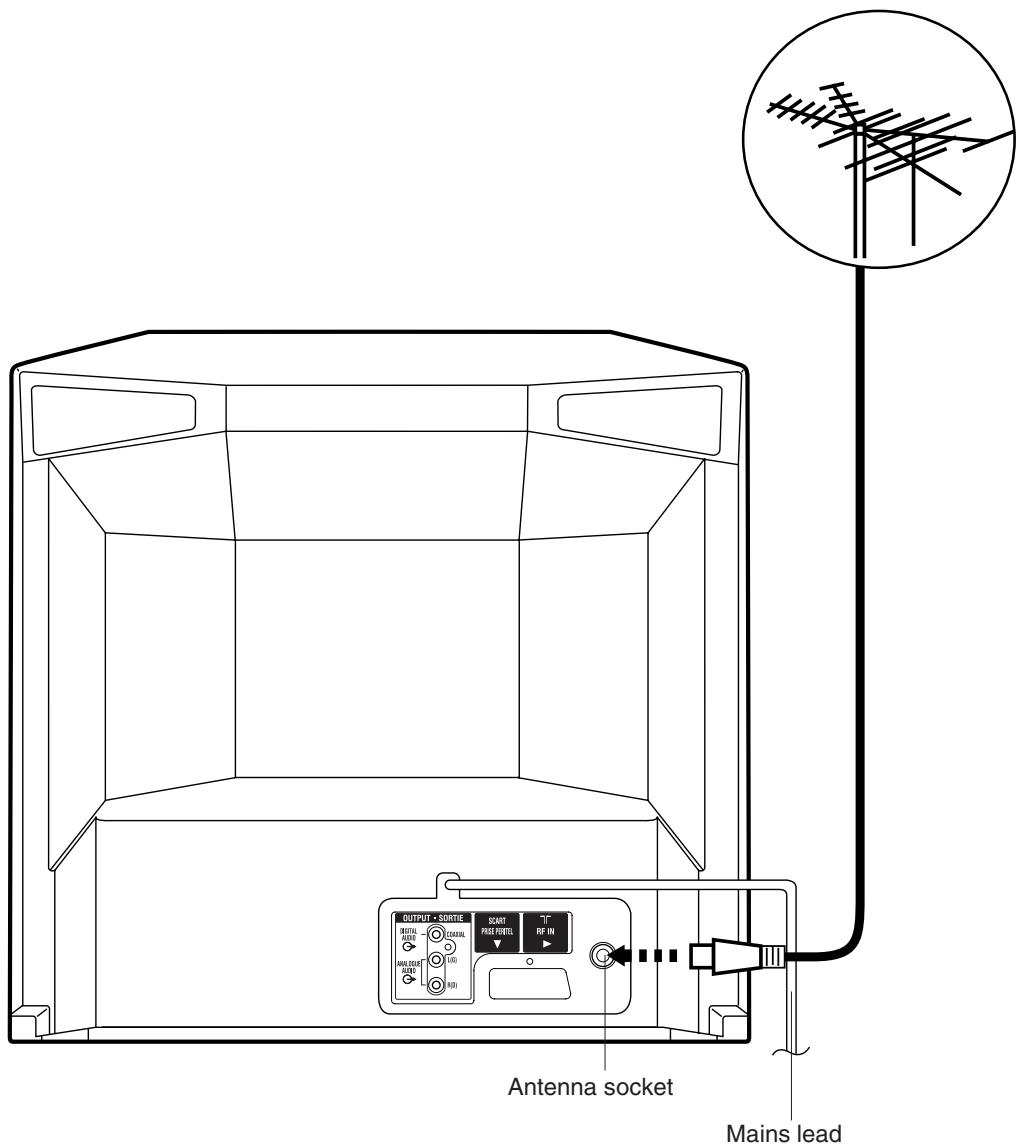


**NOTES:**

- When direct sunlight, an incandescent lamp, fluorescent lamp or any other strong light shines on the remote sensor, the remote operation may be unstable.
- When there is an obstacle between the unit and the transmitter, the remote control transmitter may not operate.

## ANTENNA CONNECTIONS

Connect an indoor or outdoor antenna to the antenna socket at the rear panel as shown below.  
For all antenna circuit problems, please consult your local dealer.



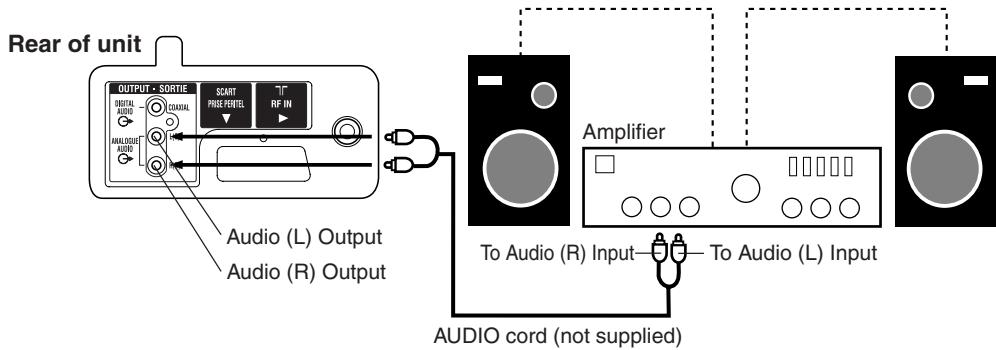
### EXTERNAL ANTENNA

The type of antenna required depends on the position of your home, its distance from the transmitter and local interference. If you do not have an antenna and you are uncertain of what to buy, you should seek the advice of a local antenna contractor.

# CONNECTIONS TO OTHER EQUIPMENTS

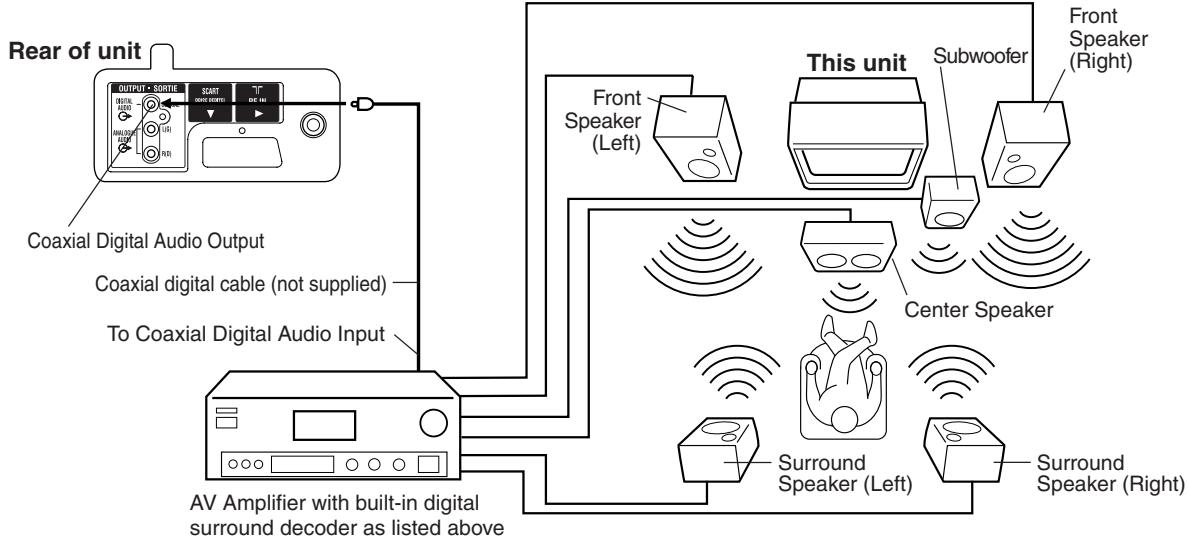
The exact arrangement you use to interconnect various video and audio components to the unit is dependent on the model and features of each component. Check the Owner's Manual provided with each component for the location of video and audio inputs and outputs.

## Using an Audio Amplifier



## Using an AV Amplifier with built-in digital surround

If you are using an Amplifier with a built-in digital surround sound decoder (such as Dolby Digital / DTS / MPEG / etc.), you can connect it as shown below.



\* Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

\* DTS and DTS Digital Out are trademarks of Digital Theatre Systems, Inc.

## NOTES:

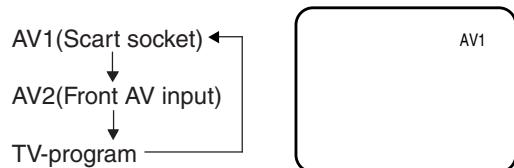
- When you make the connections above, make sure that the power of all units is switched off at the mains.
- Some DTS decoders which do not support DVD-DTS interface may not work properly with the unit.
- When playing DTS encoded material, the sound will only be available through the Digital Audio Output Socket.

# Connection to other equipment

## Input Selection

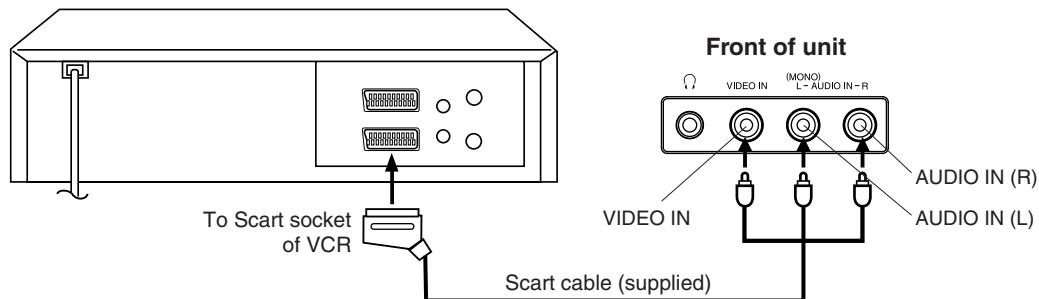
If you connect the unit to a VCR, camcorder or games console, you can select this input by pressing the **AV** button.

Press the **TV/VCR** button to select the TV mode and then press the **AV** button repeatedly to select AV1 or AV2.



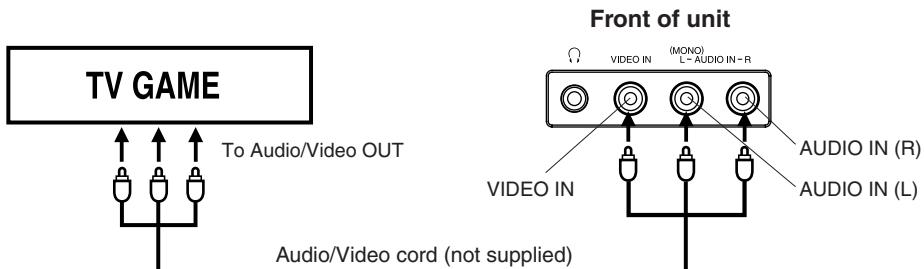
### 1. To connect the unit to a VCR

Press the **AV** button to select AV2 to use the TV as a monitor.



### 2. To connect the unit to a TV Game

The unit can also be used as a display device for many video games. However, due to the wide variety of different types of signal generated by these devices and subsequent hook-up variations required, they have not all been included in the suggested connection diagrams. Press the **AV** button to select AV2 to use the TV as a monitor. You'll need to consult each component's Owner's Manual for additional information.

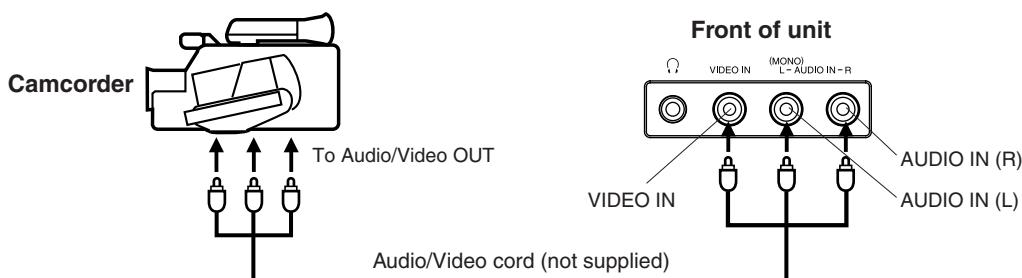


### 3. To connect the unit to a camcorder

To playback from a camcorder, connect the camcorder to the unit as shown.

Press the **AV** button to select AV2 to use the TV as a monitor.

If you wish to make a recording from the camcorder, follow the same instructions as recording a TV programme (P.23), but select AV2 for the channel.



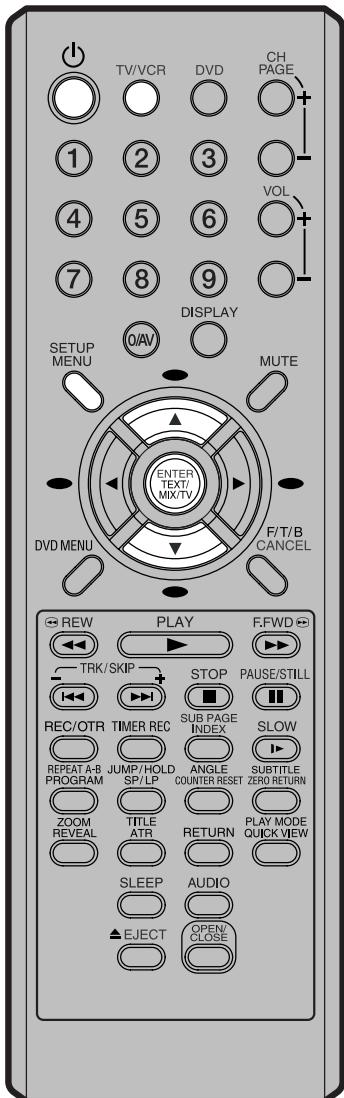
### 4. To connect the unit to another TV set (ie. a widescreen set)

Connect this unit to the other TV set using the SCART connection.

You should select the external input setting on the other TV, e.g. AV/EXT/ etc. (you may need to consult the other TV's instructions for information on this).

# ON-SCREEN LANGUAGE SELECTION

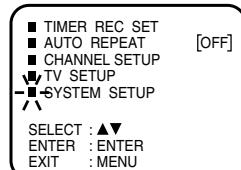
This unit can display five languages, English, German, French, Italian or Spanish.



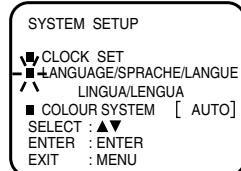
## Preparation

- Make sure that the MAIN POWER (ON) switch on the front panel is pushed in (ON). (The STANDBY (⊕) indicator lights up.)
- Press **Sub Power** (⊕) to turn on the unit. (The STANDBY (⊕) indicator goes off.)

1 Press **TV/VCR** to select TV/VCR mode. Press  **MENU**.



2 Press **▲** or **▼** to select the SYSTEM SETUP mode. Then press **ENTER**.



3 Press **▲** or **▼** to select the LANGUAGE mode. Then press **ENTER**.



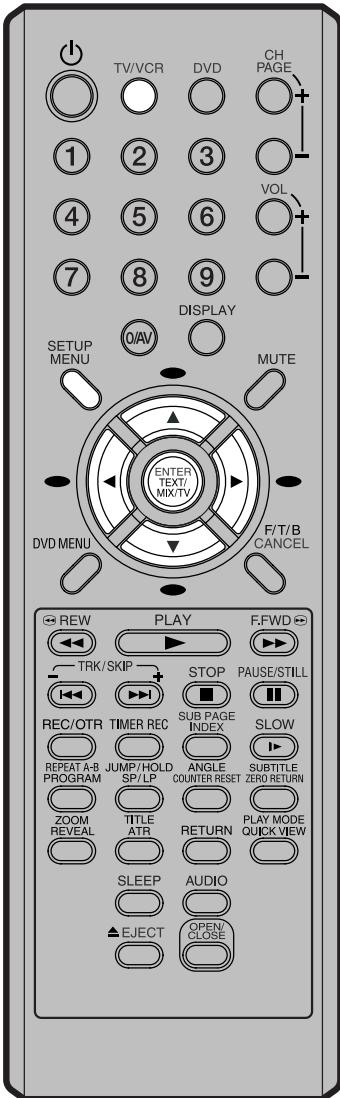
4 Press **▲** or **▼** to select the desired language. Then press **ENTER**.

## NOTE:

When you plug the AC mains lead into the mains socket for the first time the MENU screens shown in step 2 and step 3 will be skipped and the language selecting screen shown in step 4 will appear. This is not a fault - please select the language first before proceeding with setting the unit up.

# TO SET THE CLOCK

**Besides displaying the channel number and functions symbols on the screen, the unit also displays the present time and the day of the week. The digital clock is the 24 hour type.**



## Preparation

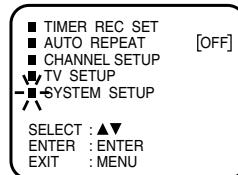
Press **TV/VCR** to select TV/VCR mode.

### EXAMPLE:

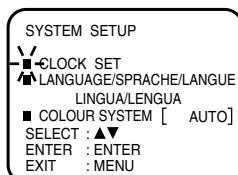
Setting the clock to 11:30, 25 March, 2006.

### 1 Press **MENU**.

Press **▲** or **▼** to select the **SYSTEM SETUP** mode, then press **ENTER**.

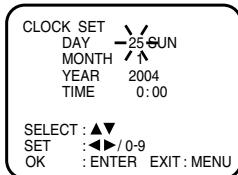


### 2 Press **▲** or **▼** to select the **CLOCK SET** mode, then press **ENTER**.

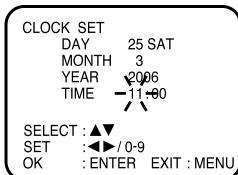


### 3 Press **◀** or **▶** to select the current date, then press **▼**.

- The day of the week shown will not be correct until you have finished entering the month and year settings.



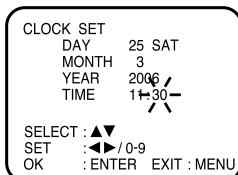
### 4 Set the month, year and hour in the same way as in step 3.



### 5 Press **◀** or **▶** to select current minute, then press **ENTER**.

The time and day will be displayed.

- You can change in 10-minutes step by holding down **▶** button.

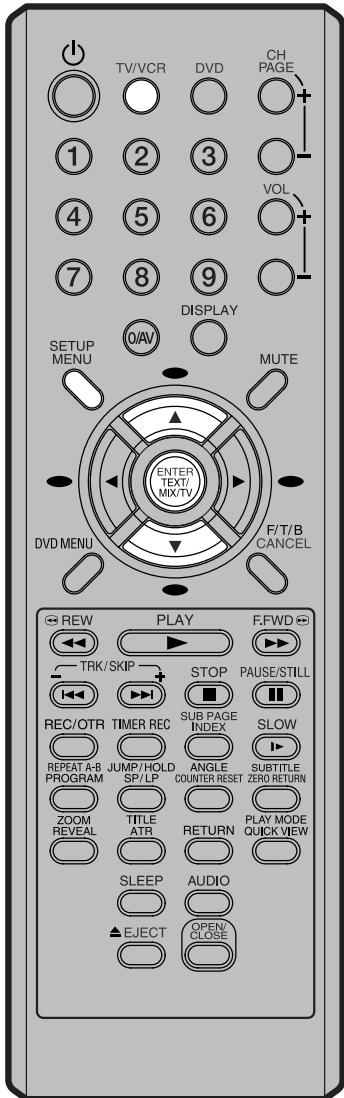


## NOTES:

- During a power failure, disconnection of the mains lead or if the **MAIN POWER (ON)** Switch is switched off, the clock and all its programmed setting will remain in the memory for 30 minutes. If the power failure is longer than 30 minutes you will have to reset the present time.
- If you want to correct the digits while setting, press **▲** until the item you want to correct is blinking, then press **◀** or **▶** to correct the desired setting.

# TUNING THE TV CHANNELS

This unit has 110 channels for you to tune and memorize into the Television. You must tune in the broadcast stations before you can enjoy watching them.

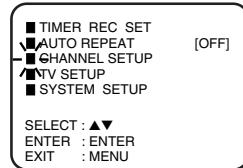


## AUTO TUNING

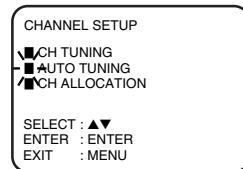
1 Press **TV/VCR** to select TV/VCR mode.  
Press **MENU**.

**Note:** If the clock is not set, press **MENU** twice.

2 Press **▲** or **▼** to select the CHANNEL SETUP mode, then press **ENTER**.



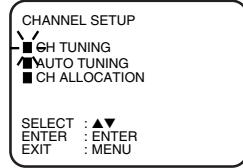
3 Press **▲** or **▼** to select the AUTO TUNING mode, then press **ENTER**.



4 The Auto Tuning will start and memorize all the channels in sequence available in your area.



5 When the Auto Tuning is finished, the CHANNEL SETUP screen will appear. Then press **MENU** twice to return to the normal screen.

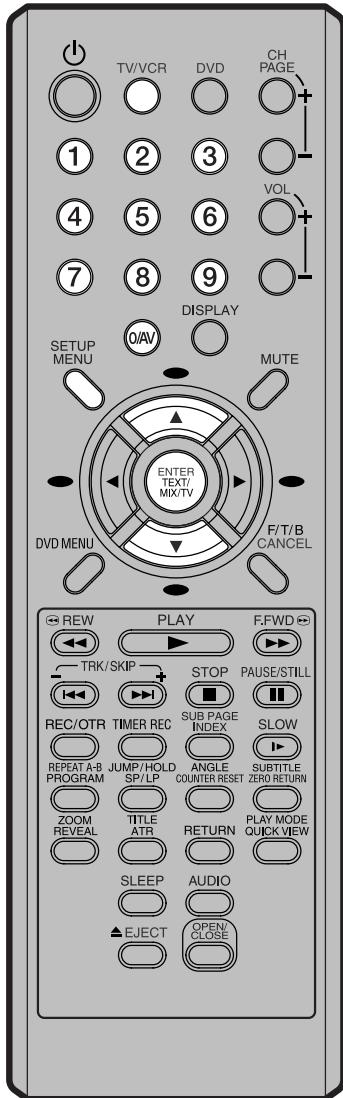


# TUNING THE TV CHANNELS

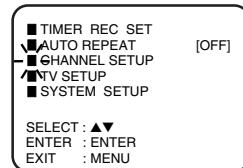
## TO CHANGE THE TV STATIONS TO ANOTHER CHANNEL POSITION

### Example:

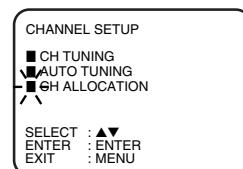
Changing the TV Station from CH 4 to CH 6 position.



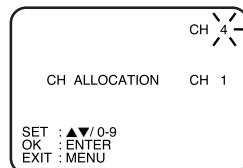
1 Press **TV/VCR** to select TV/VCR mode.  
 Press  **MENU**.  
 Press **▲** or **▼** to select the CHANNEL SETUP mode, then press **ENTER**.



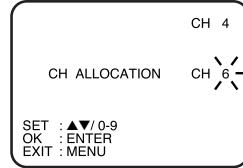
2 Press **▲** or **▼** to select the CH ALLOCATION mode, then press **ENTER**.



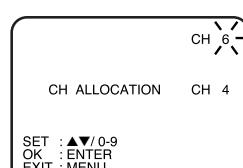
3 Press **▲** or **▼** or **Number buttons** to select the TV station to be moved. Then press **ENTER**.



4 Press **▲** or **▼** or **Number buttons** to select the new CH number you want the station to be.



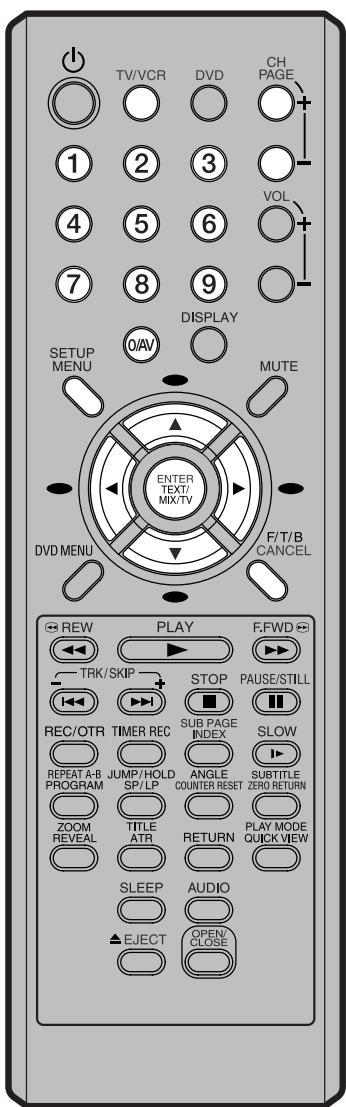
5 Press **ENTER**.  
 Press  **MENU** to return to the normal screen.



## TUNING THE TV CHANNELS

## (CONTINUED)

In certain areas of the countries which have poor reception the Automatic Tuning System may not tune your unit to the strongest broadcast signal. If you are not satisfied with the automatic tuning then select the Manual Tuning.

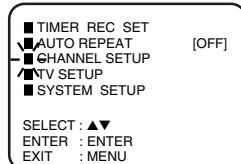


### MANUAL TUNING

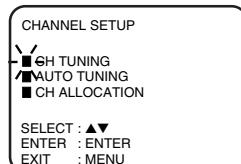
1 Press **TV/VCR** to select TV/VCR mode.

Press **MENU**.

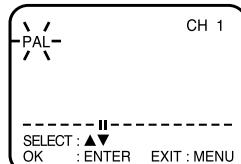
Press **▲** or **▼** to select the CHANNEL SETUP mode, then press **ENTER**.



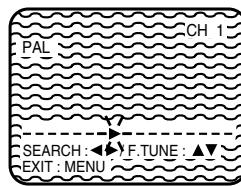
2 Press **▲** or **▼** to select the CH TUNING mode, then press **ENTER**.



3 Press the **▲** or **▼** button to select the Colour System, PAL or SECAM. Then press the **ENTER**.

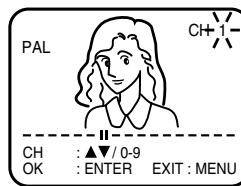


4 Press **◀** or **▶** to search the broadcast stations. Each time a station is found the search will stop. Press **◀** or **▶** to continue searching until all the stations you want are found, then press **ENTER** to store the station you have selected.



If you can not get a clear picture, press **▲** or **▼** until the picture becomes clear. When you have a clear crisp picture store this setting by pressing **ENTER**.

5 Press **▲** or **▼** to select the required channel number (1-110). Press **ENTER** to store the channel number. The unit channels can be preset to different TV broadcast channels anytime simply by repeating steps 4-5.



### TO SKIP A CHANNEL

To skip unwanted channels press **CH/PAGE** to select the channel you want to skip. Then press **CANCEL**. The channel number flashes.

To cancel the skip setting, select the skipped channel using **Direct Channel Selection**, then press **CANCEL**.

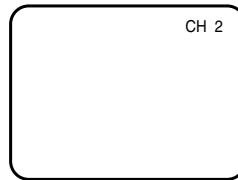
When all required stations have been set, press **MENU** 3 times to return to normal TV screen.

## TV OPERATION

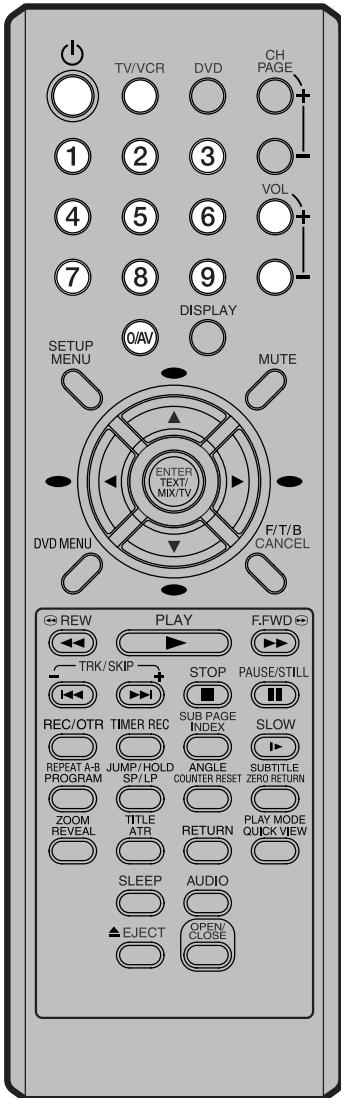
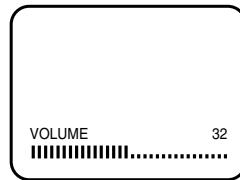
1 Press **Sub Power** (⊕). Then press **TV/VCR** to select TV/VCR mode.

2 Press **Direct Channel Selection**.

1-9: Press one of keys **1-9** as required.  
10-110: Press the two or three digits in order from left to right.

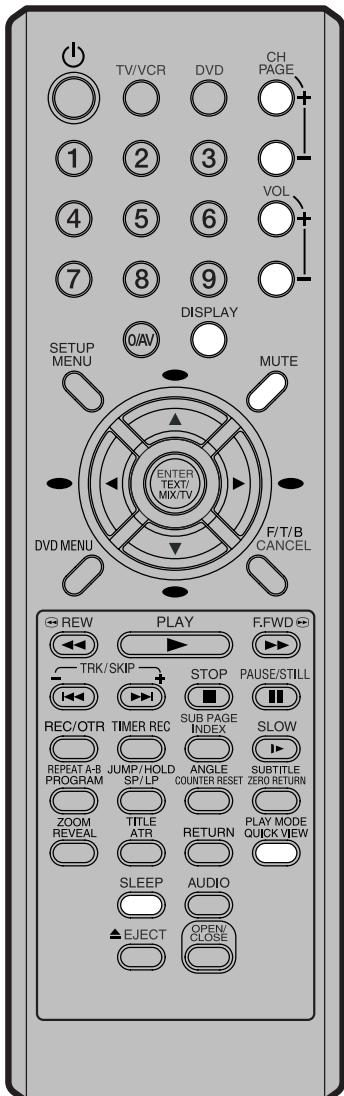


3 The **VOLUME** can be adjusted to a desired level by pressing **VOL +** or **-**. The **VOLUME** control is represented by a green bar on the screen.



**NOTE:**

If the station being viewed stops broadcasting, the TV will shut off after 15 minutes.

**NOTE:**

If **SLEEP** is pressed when the unit is the REC mode, the clock will count down and the picture will shut off at the set time, but the recording continues.

**MUTE**

To cut off the sound, press this button once. The unit will be silenced and the symbol "MUTE" will appear on the screen. The muting can be released by pressing **MUTE** again or **VOL +** or **−**.

**USING CH + OR − BUTTON**

Press and release **CH +** or **−**. For channels to change properly, they must be correctly tuned into the unit's memory (P.12-13).

**QUICK VIEW**

This button allows you to go back to the last channel selected by pressing **QUICK VIEW**. Press this button again to return to the last channel you were watching.

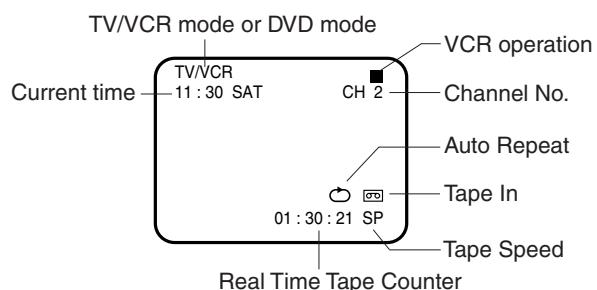
**SLEEP**

To set the TV to turn off at a set time, press **SLEEP** on the remote control. The clock will count down 10 minutes each time the button is pressed in the order of 120, 110, ..., 20, 10, 0. After the sleep time is programmed, the display will disappear and will reappear every 10 minutes. To confirm the sleep time setting, press **SLEEP** once and the remaining time will be momentarily displayed. To cancel the sleep time, press **SLEEP** repeatedly until the display turns to 0.

**DISPLAY**

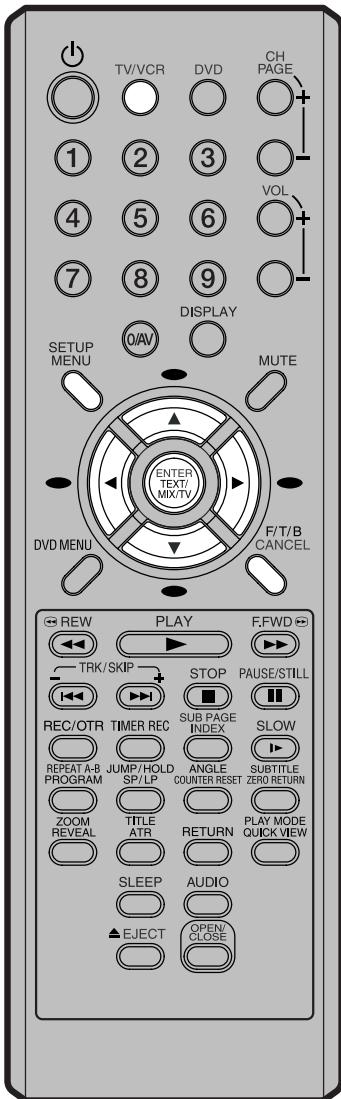
Press **DISPLAY**. The current time, channel number, real time tape counter, tape speed and VCR operation will be indicated.

Press **DISPLAY** again to remove the call display.



# PICTURE CONTROL ADJUSTMENTS

The picture settings have been factory adjusted under optimum signal reception. However, conditions may not be the same in your area. After tuning in the unit, allow it to warm up for a few minutes. If the picture is not to your liking, make the following adjustments using the remote control.



## NOTE:

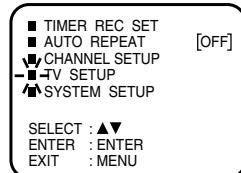
To resume the normal picture adjustment, press **CANCEL**, while in the picture mode menu.

## Preparation

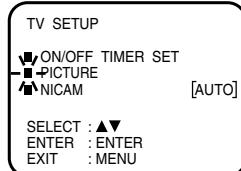
Press **TV/VCR** to select TV/VCR mode.

1 To adjust the picture, press **MENU**.

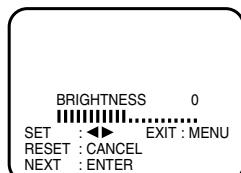
Press **▲** or **▼** to select the TV SETUP mode, then press **ENTER**.



2 Press **▲** or **▼** to select the PICTURE mode, then press **ENTER**.



3 Press **ENTER** until your desired PICTURE mode appears e.g. brightness, contrast, colour, sharpness. Then press **◀** or **▶** to adjust the level of the PICTURE. (See below for details.)



4 After finishing the adjustment, press **MENU** 3 times to return to normal TV screen.

Each time you press **ENTER** the picture adjustment Screen changes as follows.

## BRIGHTNESS

Press **ENTER** until "BRIGHTNESS" appears on the screen, then press **◀** or **▶** to adjust the brightness. When **▶** is pressed, the darker portions of the picture become lighter.



## CONTRAST

Press **ENTER** until "CONTRAST" appears on the screen, then press **◀** or **▶** to adjust the contrast. Pressing **▶** improves the contrast and enhances the colour. Picture looks sharper in the daytime by increasing the contrast level and sharper at night by lowering the contrast level.



## COLOUR

Press **ENTER** until "COLOUR" appears on the screen, then press **◀** or **▶** to adjust the intensity of the colours. This should be set to where the colours appear normal in intensity and brilliance.



## SHARPNESS

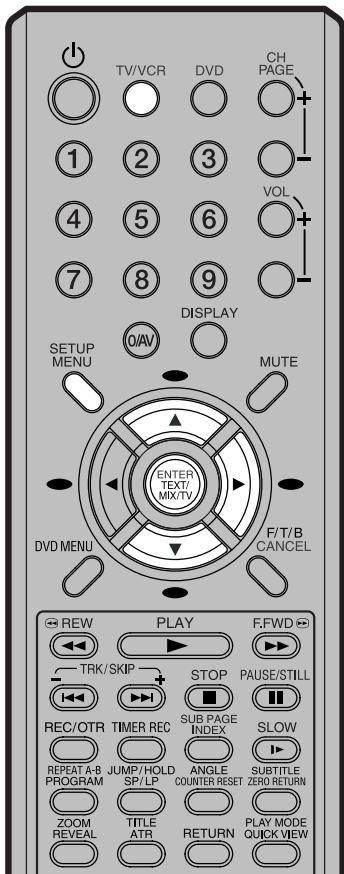
Press **ENTER** until "SHARPNESS" appears on the screen, then press **◀** or **▶** to adjust the sharpness. In weak reception areas, the picture may be more pleasing when the SHARPNESS is set at a lower level.

## NOTES:

- The picture settings can only be adjusted by using **◀** or **▶** and **ENTER** when they are displayed on the screen.
- Press **MENU** 3 times to return to normal TV screen.
- The On-screen display will disappear about one minute after finishing an adjustment.

# TO SET THE ON TIMER

This feature allows you to have the TV automatically turn "ON" at a predetermined time. Once you have programmed the ON TIMER, it will switch the TV on every day at the same time and same channel, until you cancel this setting.



## NOTES:

- The TV will automatically turn off approximately 1 hour later after the ON TIMER turns on the TV. If you wish to continue watching the TV, press any button to cancel the one hour automatic shut off. This shut off feature prevents the TV from playing continuously if no OFF TIMER is set.
- To cancel the ON TIMER function; To cancel ON TIMER, follow above steps 1-6, then press **▲** or **▼** to select the CANCEL position. Press **MENU** to return to the TV.
- After setting the ON TIMER, "■" of the OFF TIMER will flash on and off. If you wish to set the OFF TIMER, press **ENTER** then follow the steps 3-6 on page 19.

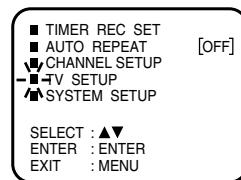
## Preparation

Press **TV/VCR** to select TV/VCR mode.

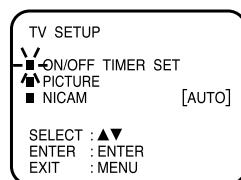
### EXAMPLE:

Turning on the TV to channel 3 at 7:45, MONDAY-FRIDAY.

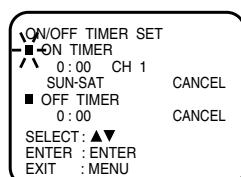
**1** Press **MENU**. Select the TV SETUP mode using **▲** or **▼** then press **ENTER**.



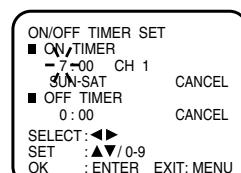
**2** Press **▲** or **▼** to select the ON/OFF TIMER SET mode, then press **ENTER**.



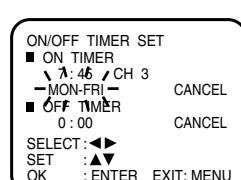
**3** Press **▲** or **▼** to set the ON TIMER option, then press **ENTER**.



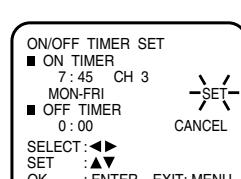
**4** Press **▲** or **▼** to set the desired hour, then press **▶**.



**5** Set the desired minute, channel and daily or weekly timer date as in step 4, then press **▶**.

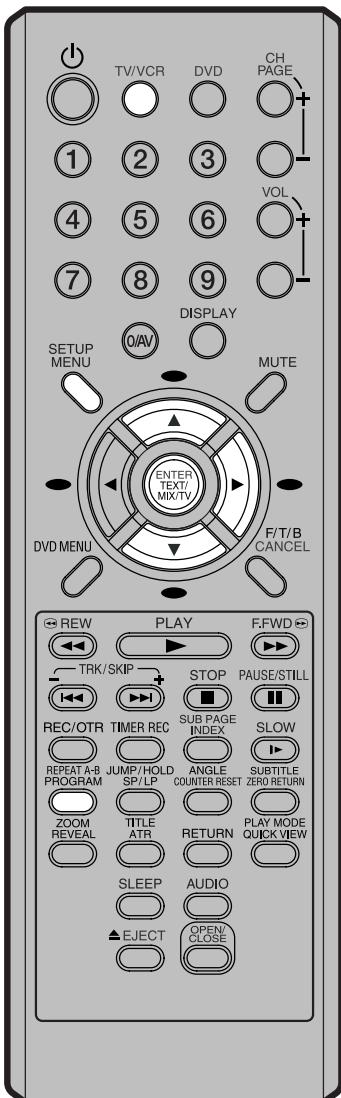


**6** Press **▲** or **▼** to select the SET mode, then press **ENTER**. Press **MENU** 3 times to return to normal TV screen.



# TO SET THE OFF TIMER

This feature allows you to have the TV turn "OFF" automatically at a predetermined time. Once you have programmed the OFF TIMER, the TV will be automatically turned off at the same time each day, until you cancel this setting.



## NOTES:

- If a station being viewed stops broadcasting, the TV will automatically shut itself off after 15 minutes.
- To cancel the OFF TIMER function: To cancel OFF TIMER, follow above steps 1-5, then press ▲ or ▼ to select the CANCEL position. Press **MENU** to return to the TV.
- To confirm the ON/OFF TIMER: Press **PROGRAM** twice to indicate the programmes on the screen.

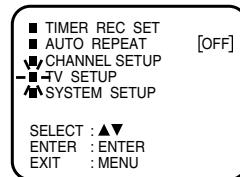
## Preparation

Press **TV/VCR** to select TV/VCR mode.

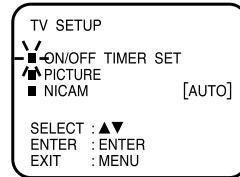
### EXAMPLE:

Turning off the TV at 8:30.

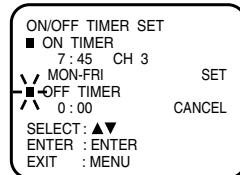
**1** Press **MENU**. Select the TV SETUP mode using the ▲ or ▼ button, then press **ENTER**.



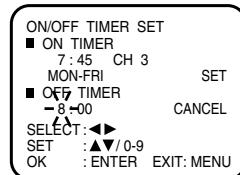
**2** Press ▲ or ▼ to select the ON/OFF TIMER SET mode, then press **ENTER**.



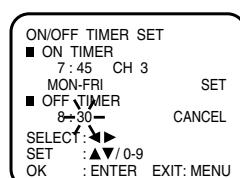
**3** Press ▲ or ▼ to set the OFF TIMER option, then press **ENTER**.



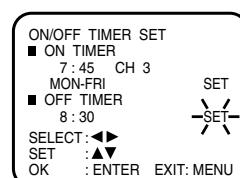
**4** Press ▲ or ▼ to set the desired hour, then press ▶.



**5** Press ▲ or ▼ to set the desired minute, then press ▶.



**6** Press ▲ or ▼ to select the SET mode, then press **ENTER**. Press **MENU** 3 times to return to normal TV screen.



# LOADING AND UNLOADING THE VIDEO CASSETTE TAPE

Use only video cassette tapes marked **VHS**.

**Preparation:** Press **TV/VCR** to select TV/VCR mode.

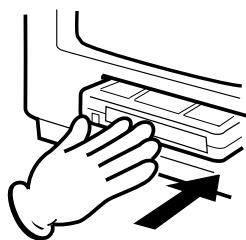
## LOADING

Push the centre of the tape until it is automatically inserted.

**AUTOMATIC POWER ON AND PLAY** (Make sure that the MAIN POWER switch is pushed in.)

When loading a cassette tape without the erase prevention tab intact, the unit will turn on and playback will start immediately.

Insert the cassette with its labelled side facing you.  
An inverted cassette cannot be inserted.

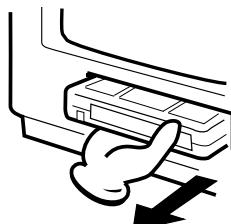


## UNLOADING

**1** To unload a video cassette, press **EJECT** on the remote control, or press the **■/▲** (STOP/EJECT) button on the unit twice. The first press will stop the tape in any mode. The second press will eject the tape.



**2** Pull the cassette out.



### AUTOMATIC EJECT

When the unit is automatically rewinding the tape and reaches its end (AUTO REWIND), the tape will be ejected automatically (See **NOTE** on page 24).

**NOTES:**

- Always eject the tape when not in use.
- The cassette can be ejected even if the ON (○) button is OFF.

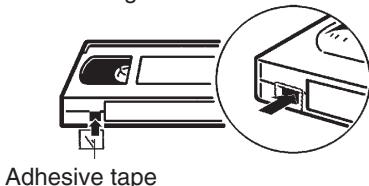
## TO PREVENT ACCIDENTAL ERASURE

After recording, break off the erase prevention tab if you do not wish to record over the tape.



## TO RECORD AGAIN

Cover the hole with adhesive tape.  
Be careful the tape does not extend past the edges of the cassette housing.

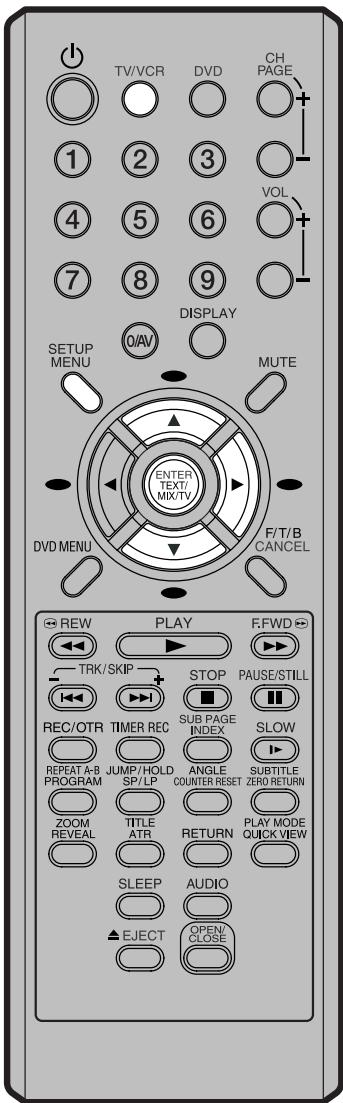


## TAPE SPEED AND MAXIMUM RECORDING/PLAYBACK TIME

TAPE SPEED	VIDEO CASSETTE TAPE					
	E-300	E-240	E-180	E-90	E-60	E-30
SP (Standard Play)	5 hours	4 hours	3 hours	1-1/2 hours	1 hour	30 minutes
LP (Long Play)	10 hours	8 hours	6 hours	3 hours	2 hours	1 hour

# COLOUR SYSTEM SELECTION

Select your appropriate Colour System.

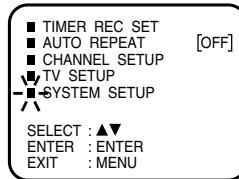


## Preparation

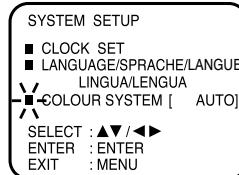
Press the **TV/VCR** to select TV/VCR mode.

### 1 Press **MENU**.

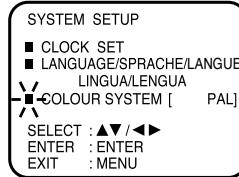
Press **▲** or **▼** to select the SYSTEM SETUP mode. Then press **ENTER**.



### 2 Press **▲** or **▼** to select the COLOUR SYSTEM mode.

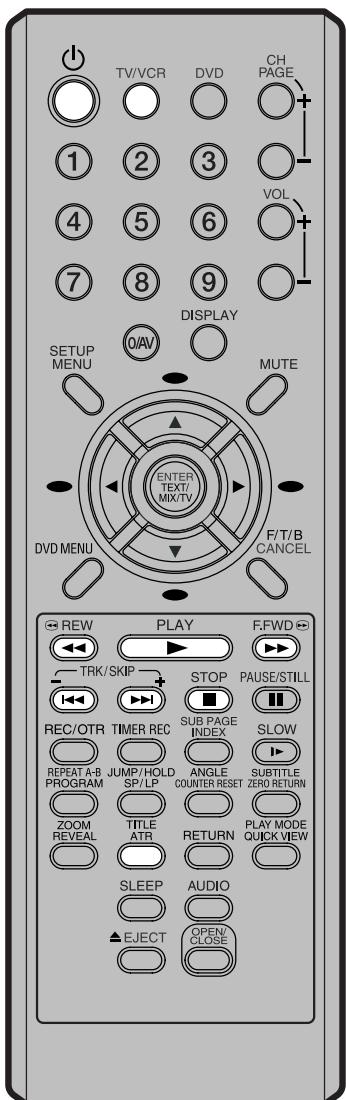


### 3 Press **▶** to select the AUTO, PAL, MESECAM or SECAM. Press **MENU** twice to return to normal TV screen.



# PLAYBACK

To play a pre-recorded cassette tape.

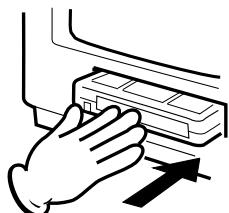


## TO START PLAYBACK

1 To turn "ON" the power of the TV/VCR, press **Sub Power** (⊕).

Press **TV/VCR** to select TV/VCR mode.

2 Load a pre-recorded tape  
(When loading a cassette tape without the erase prevention tab, playback will start automatically).



3 Press **PLAY**.  
Playback will start.  
"▶" will appear on the screen.



## TO STOP PLAYBACK

Press **STOP**.

"■" will appear on the screen.



## TO REWIND OR FORWARD THE TAPE RAPIDLY

Press **REW** when in the STOP mode.

"◀" will appear on the screen.



Press **F.FWD** when in the STOP mode.

"▶" will appear on the screen.



## FORWARD/REVERSE PICTURE SEARCH

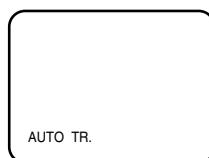
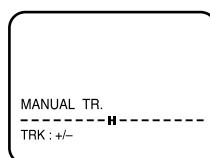
If you want to see the tape program during REW (F.FWD) mode, press and hold **REW** (F.FWD).

The backward (forward) visual search picture will be seen on the screen. Release the button to return to the REW (F.FWD) mode.

## DIGITAL AUTO TRACKING ADJUSTMENTS

When a tape is played, the Digital Auto Tracking system automatically adjusts the tracking to obtain the best possible picture. If noise bars appear during playback, adjust the tracking manually as follows:

- Press **TRK/SKIP** + or - to obtain the best possible picture.  
"MANUAL TR." will appear for 4 seconds on the screen.  
To resume automatic tracking, press **ATR**.  
"AUTO TR." will appear for 4 seconds on the screen.



## SPECIAL PLAYBACK

### TO VISUALLY SEARCH FOR DESIRED POINTS

When either **F.FWD** or **REW** is pressed in the PLAYBACK mode, the speed search picture will appear. When pressed twice the search picture will increase in speed. Speed search times depend upon the speed used (SP or LP) during recording. To rewind or fast forward a tape, press **STOP** and then press **REW** or **F.FWD**.

### SPEED SEARCH TIMES

TAPE SPEED		PICTURE SEARCH SPEED	
		PRESS ONCE	PRESS TWICE
PAL	SP (Standard Play)	5 X	7 X
	LP (Long Play)	7 X	13 X
NTSC	SP (Standard Play)	3 X	5 X

Press **REW** once or twice in the PLAYBACK mode. Press **F.FWD** once or twice in the PLAYBACK mode. To return to playback, press **PLAY**.

### STILL PICTURE

- 1 Press **PAUSE/STILL** in the PLAYBACK mode. To prevent damage to the tape, STILL playback is automatically resumed to the PLAY mode after 5 minutes.
- 2 To continue the normal playback, press **PLAY**.

### FRAME BY FRAME ADVANCE

Press **PAUSE/STILL** during STILL playback.

The still picture will advance by one frame each time you press the button. Hold the button for continuous frame by frame viewing.

Press **PLAY** again to resume normal playback.

### SLOW MOTION PLAYBACK

Press **SLOW** in the PLAYBACK mode. Each additional press of **SLOW** will change the slow speed.

Press **PLAY** again to resume normal playback.

#### NOTE: SLOW TRACKING AND VERTICAL LOCK ADJUSTMENT

If noise bars appear in the picture during slow motion, press **TRK/SKIP +** or **-** to reduce the noise bars.

If the still picture jitters excessively, press **TRK/SKIP +** or **-** to stabilize the still picture.

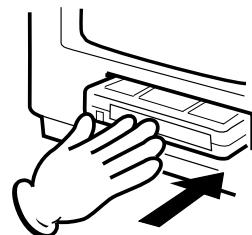
#### NOTES:

- The audio output is muted during SPEED SEARCH and STILL.
- A few noise bars will appear on the picture during SPEED SEARCH.
- It is normal for the picture to be noisy in the STILL mode.

### NTSC TAPE PLAYBACK

Your TV/VCR can playback Video tapes recorded in the NTSC Colour System (TV system usually used in America and Japan).

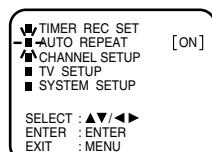
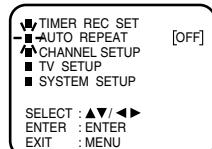
Load a NTSC recorded tape (When loading a cassette tape without an erase prevention tab, playback will start automatically).



To play the NTSC tape press **PLAY**. Your TV/VCR will playback Video tapes recorded using NTSC Standard play (SP), Long play (LP) and Extended play (EP). However there will be a deterioration in sound quality in the Long play and Extended play modes.

### TO WATCH A TAPE REPEATEDLY

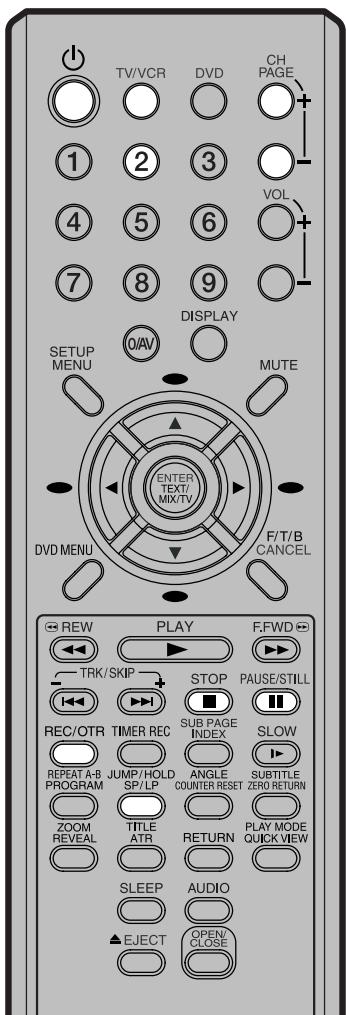
- 1 Press  **MENU**. Press **▲** or **▼** to select AUTO REPEAT option.
- 2 Press **▶** to select the ON position.
- 3 Press  **MENU** to return to normal TV screen. If you press **PLAY**, the TV/VCR will repeat playing the video tape until the repeat mode is cancelled (you can still stop the tape by pressing **STOP**).



#### NOTE:

To cancel repeat mode, follow above steps 1 and 2, then press **▶** to select the OFF position. Press  **MENU** to return to the TV.

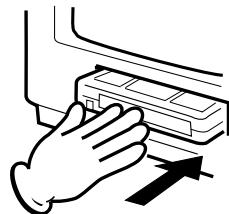
# RECORDING A TV PROGRAMME



## RECORDING AND VIEWING THE SAME TV PROGRAMME

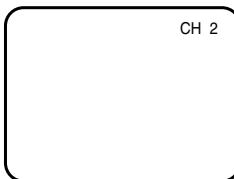
1 To turn "ON" the TV/VCR, press **Sub Power** (⊕). Press **TV/VCR** to select TV/VCR mode.

2 Load a cassette tape with the erase prevention tab intact.

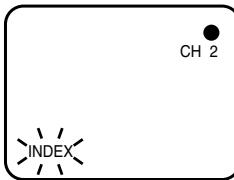


3 Press **SP/LP** to select the desired tape speed SP or LP.

4 Press **Direct channel selection** or **CH +** or **-** to select the channel to be recorded (Example: Channel 2).



5 Press **REC/OTR**. "●" and the channel number will appear on the screen and the REC/OTR indicator will light.



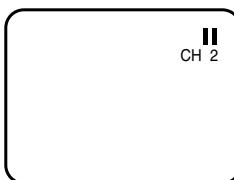
## TO STOP RECORDING

Press **STOP** to stop recording. "■" will appear on the screen.



## TO STOP RECORDING TEMPORARILY

Press **PAUSE/STILL** to stop recording of unwanted material. "■■" will appear on the screen and the REC/OTR indicator will blink on and off. Press again to continue the recording.



### NOTE:

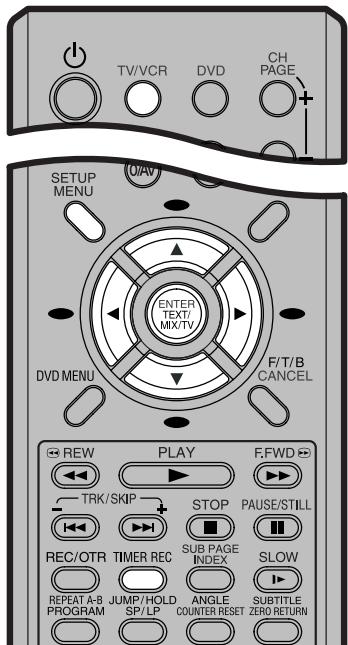
To prevent damage to the video head and video tape the pause function will stop the VCR operation after about 5 minutes.

### NOTES:

- If the power is switched off during recording, the TV section shuts off and the VCR section continues to record.
- The selected channel cannot be changed during recording.
- If you try to change the channel while a recording is being made, "RECORDING IN PROGRESS" will appear on the TV screen for approx. 4 seconds.
- AUTO REWIND FEATURE:** This unit will automatically rewind and eject the tape when the tape has ended (except during OTR and TIMER REC).
- If the erase prevention tab has been removed, the tape will eject when **REC/OTR** is pressed.
- Although you cannot change the channel while the unit is recording, you can still switch to DVD mode and watch a DVD without affecting the recording.

# TIMER RECORDING

Timer recording can be programmed on screen with the remote control. The built-in timer allows automatic unattended recording of up to 8 programmes within 1 month.



## NOTES:

- If programming is performed without a tape in the unit, or with a tape without an erase prevention tab, Timer Recording is not possible. If a tape without an erase prevention tab is in the unit, the tape will be ejected.
- To record from external equipment connected via the SCART socket (AV1) or the front AV socket (AV2), press **◀** or **▶** repeatedly until "AV1" or "AV2" appears when setting the channel in step 5.
- The VCR section cannot be used while the TIMER REC indicator is lit. If you want to use the VCR operation, press **TIMER REC** to deactivate the timer.
- If there is a power failure, the power plug is disconnected, or the MAIN POWER (ON) Switch is switched off for more than approx. 30 mins, all programmed timer recordings and clock settings will be lost. In this case, reset the clock (see page 11) and reprogram any timer recordings.
- If you want to correct the digits while setting, press **▲** until the item you want to correct flashes, then press **◀** or **▶** to correct the desired setting.

## Preparation

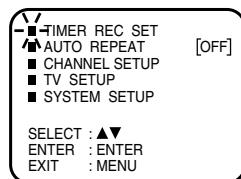
- Load a cassette tape with the erase prevention tab intact.
- The unit will automatically turn on.
- Make sure that the clock shows the present time correctly.

### EXAMPLE:

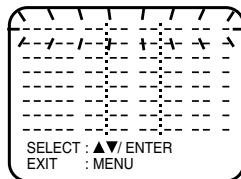
Programme a timer recording for 13:00-14:30, channel 3, on timer programme number 1 (Tape speed : LP).

**1** Press **TV/VCR** to select TV/VCR mode.  
Press  **MENU**.

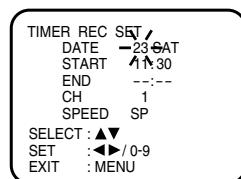
**2** Check that the TIMER REC SET option is selected, then press **ENTER**.



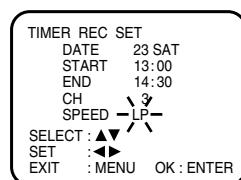
**3** Press **▲** or **▼** to select one of the program lines, then press **ENTER**.



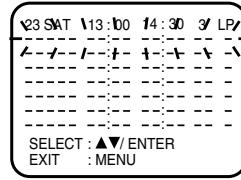
**4** Press **◀** or **▶** to select the desired date or every day or every week setting, then press **▼**.



**5** Set the start time, end time, channel and tape speed as in step 4.  
When you have finished setting all your recordings, press **ENTER**. Press the  **MENU** twice to return to normal TV screen.



- When you set the minute, you can change in 10-minutes step by holding down **▶**.



**6** To set the timer for another programme, press **▲** or **▼** until a blank programme line blinks, then press **ENTER**. Repeat steps 4 to 5 to set the second programme.

**7** Press **TIMER REC**. The TIMER REC indicator will light. The Timer is programmed, when the programmed time is reached, the recording is automatically started.



To cancel timer recording, press the button again and TIMER REC indicator will go out.

# OTHER FUNCTIONS FOR TIMER RECORDING

## TO SET DAILY/WEEKLY TIMER

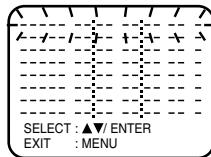
When setting the date in the step 4 on page 25, press **◀** repeatedly when the current day is displayed. The setting changes as follows:

### Example

The current day (Friday) → SUN-SAT (Sunday to Saturday)  
 ↑  
 MON-SAT (Monday to Saturday)  
 ↓  
 One month later  
 minus one day  
 MON-FRI (Monday to Friday)  
 ↓  
 WKL-WED (Weekly Wednesday)  
 ← WKL-THU (Weekly Thursday)

## TO CANCEL A PROGRAM

Press **▲** or **▼** to select the TIMER REC SET option in the MENU, then press **ENTER**.  
 Press **▲** or **▼** to select the unnecessary program, and press **CANCEL** to cancel the program. Press **MENU** twice to return to normal TV screen.



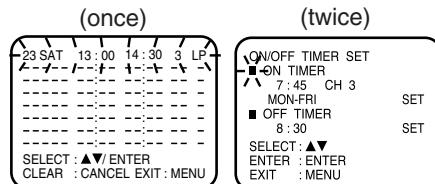
### NOTES:

- The everyday/every week recording can be made continuously until the recording is canceled or the tape reaches the end.
- During timer recording, the automatic rewinding mechanism does not function.

## TO CONFIRM THE SETTINGS

Press **PROGRAM** once. The TV screen displays the timer program list.

Press **PROGRAM** again. The TV screen displays the ON/OFF TIMER setting.

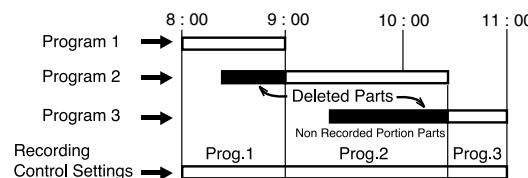


Press **PROGRAM** 3 times. The screen returns to the normal screen.

## IF THE PROGRAM OVERLAPS ANOTHER

### NOTE:

Do not overlap programs as portions of the conflicting programs will be lost. The first recording time has priority over the next recording time as shown in the diagram.

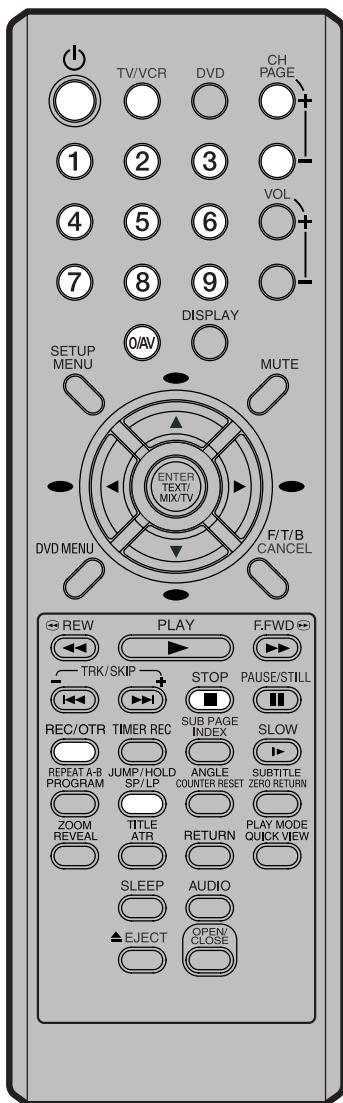


### NOTES:

- You can correct or cancel the programmed setting in program confirm mode.
- If you press an invalid button during timer recording (such as **PLAY**, **STOP**, **REC/OTR** etc.), "RECORDING IN PROGRESS" will appear on the TV screen for approx. 4 seconds.

# ONE-TOUCH TIMER RECORDING (OTR)

The One-touch Timer Recording feature provides a simple and convenient way to make a timed recording.



## NOTES:

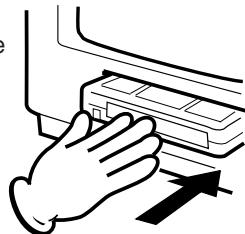
- To cancel OTR, press **STOP**.
- You cannot change the channel while the unit is recording, but you can switch to the DVD mode and watch a DVD without affecting the recording.

## EXAMPLE:

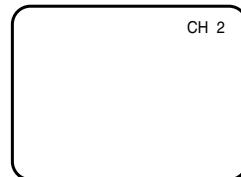
One-touch Timer Recording for 30 minutes.

- 1 Press **Sub Power** (⊕) to turn on the unit. Then press **TV/VCR** to select TV/VCR mode.

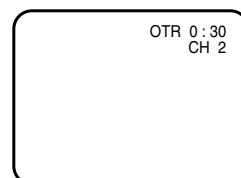
- 2 Load a video cassette with the erase prevention tab intact.



- 3 Press **SP/LP** to select the desired tape speed (SP or LP). SP or LP will appear on the screen.



- 4 Press **Direct Channel Selection** or **CH +** or **-** to select the channel to be recorded (Example: Channel 2).



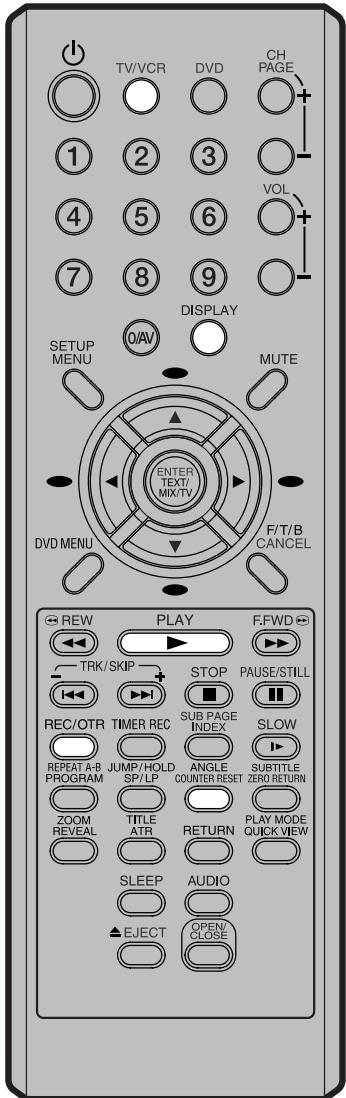
- 5 Press **REC/OTR** to begin recording. Press the button again to stop recording after 30 minutes. Each additional press of **REC/OTR** will increase recording time as shown below, up to a maximum of 6 hours. "OTR" will appear on the screen.

Press **REC/OTR** to increase the time needed for recording (See the chart below).

Press	Recording time	Press	Recording time
once	NORMAL REC	6 times	3:00
twice	0:30	7 times	4:00
3 times	1:00	8 times	5:00
4 times	1:30	9 times	6:00
5 times	2:00	10 times	NORMAL REC

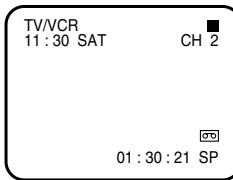
# USING THE REAL TIME TAPE COUNTER

The On-Screen Real Time Tape Counter shows the tape running time in Hours, Minutes and Seconds.

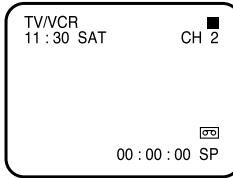


## TO VIEW THE COUNTER DISPLAY

- 1 Press **TV/VCR** to select TV/VCR mode.  
Press **DISPLAY** to display the Real Time Tape counter.



- 2 Press **COUNTER RESET** to set the counter to "00:00:00".



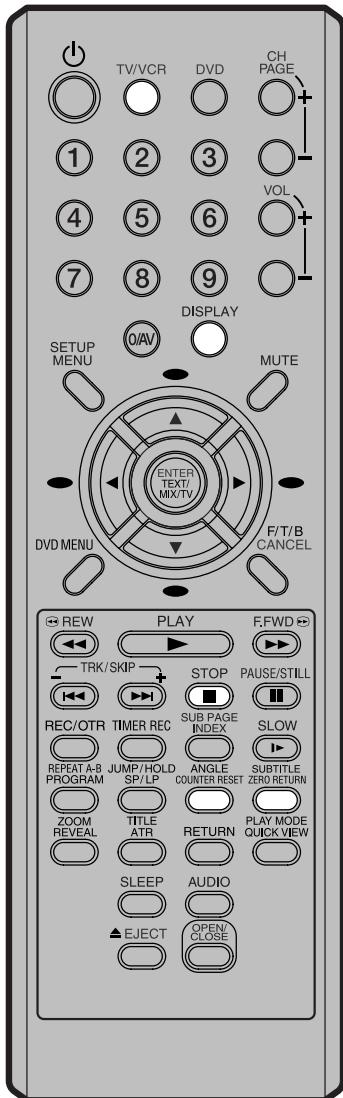
- 3 Press **PLAY** or **REC/OTR** to start the tape, the counter will display the passed time.
- 4 When you wish to make the counter disappear, press **DISPLAY** once again.

## NOTES:

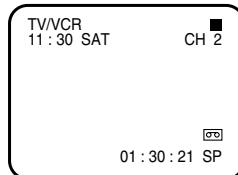
- If you rewind the tape from "00:00:00", a minus sign “-” will be displayed in front of the counter.
- When you load a tape, the counter will change to "00:00:00".
- The counter does not function on non-recorded (blank) sections of the tape. When you rewind, fast forward or play tapes through blank sections, the counter stops.

# USING ZERO RETURN

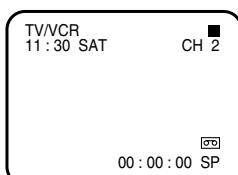
The zero return function provides a convenient method of rapidly returning to the starting point of recording or playback. The starting point can be indexed for any location on the tape by pressing the COUNTER RESET button and ZERO RETURN button.



1 Press **TV/VCR** to select TV/VCR mode.  
Press **DISPLAY**.

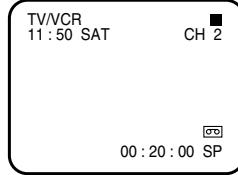


2 Before playback or recording, press **COUNTER RESET** to set the counter to "00:00:00".

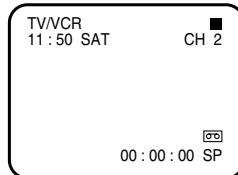


3 Begin playback or recording.

4 Press **STOP**.

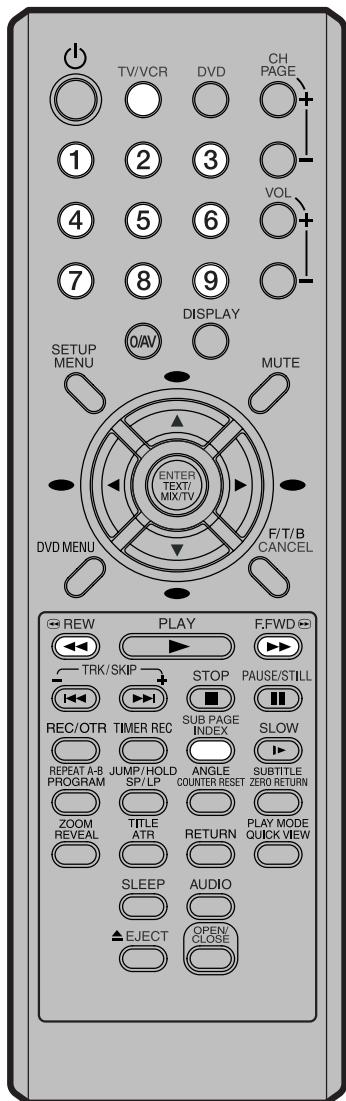


5 Press **ZERO RETURN**.  
The tape will rewind and automatically stop at the "00:00:00" position.



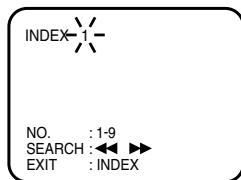
# VIDEO INDEX SEARCH SYSTEM (INDEX)

The VIDEO INDEX SEARCH SYSTEM (INDEX) enables you to locate the beginning of any recording made on the unit. The Index Search function automatically records an INDEX mark on the tape whenever a recording is initiated. This mark can easily be located by using F.FWD and REW.



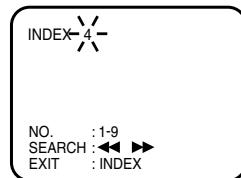
## SEARCHING FOR AN INDEX MARK

1 Press **TV/VCR** to select TV/VCR mode.  
To search for an index mark, or skip over a number of index marks:  
Press **INDEX** during stop or playback.



2 Select the number of INDEX marks to be skipped by using **Channel Number keys (1-9)**.

**EXAMPLE:** When the tape has four separate recorded Programmes, select 4 to go to the beginning of the 4th programme (4th index mark).



3 Press **F.FWD** or **REW**. The unit will skip over the selected number of INDEX marks and will start playback at the selected mark.



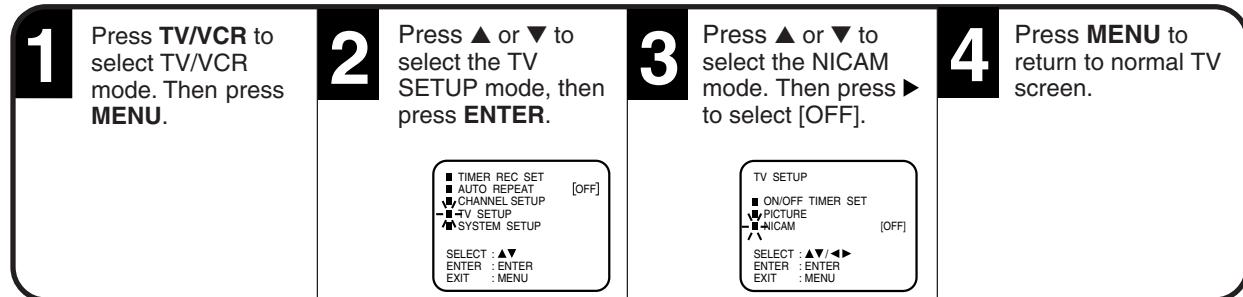
## NOTES:

- When you recorded an INDEX mark at the very beginning of the tape, the mark may not be found.
- During INDEX search, the tape may stop and begin to play at a slightly different location.
- INDEX may not function properly with old or worn out video tapes.

# NICAM STEREO RECORDING AND PLAYBACK/RECEPTION DISTURBANCE

## RECORDING

This unit is capable of recording sound in Hi-Fi system. NICAM STEREO broadcasts are recorded in its original sound system automatically. If the NICAM sound has noise, select NICAM "OFF" as follows.



## SELECTING STEREO OR BILINGUAL SOUND FOR A PRE-RECORDED TAPE HI-FI SIGNAL INDICATION

Press **AUDIO** to select stereo/mono or bilingual playback. See the table below for more information.

On-screen indications (for 4 sec.)	Stereo programme	Bilingual programme	On-screen indications (for 4 sec.)	Stereo programme	Bilingual programme
STEREO	Stereo	Main sound from L CH speaker, sub sound from R CH speaker.	R CH	Right channel signal output from both loudspeakers	Sub (MONO B) sound heard from both speakers.
L CH	Left channel signal output from both loudspeakers	Main (MONO A) sound heard from both speakers.	MONO	Mono	Main (MONO A) sound heard from both speakers.

**Hi-Fi signal indication**  
Press **DISPLAY**.  
It will be displayed for approx. 4 seconds when playing HiFi video cassette tapes.



**NOTE:** When playing HiFi cassette tapes recorded on another VCR, the sound output may be distorted. This is normal and no indication of a unit malfunction. Try to minimize sound distortions by using **TRK/SKIP +/-** buttons or change to MONO by pressing **AUDIO**.

## RECEPTION DISTURBANCE

The most common types of television interference are as follows.

### IGNITION

Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from car ignition systems, neon lamps, electrical drills and other electrical appliances.

### GHOSTS

Ghosts are caused by the television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other object. Changing the direction or position of the antenna may improve the reception.

### SNOW

If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.

### RADIO FREQUENCY INTERFERENCE

The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture.

## CARE AND MAINTENANCE

To prevent fire or shock hazard, disconnect the unit from the AC power source before cleaning. The finish on the cabinet may be cleaned with mild soap and a soft damp cloth. Take care when cleaning or wiping the plastic parts.

### VIDEO HEAD CLOGGING

The video heads record and playback picture and sound on the video tape. In the event that they become dirty you won't be able to do a perfect recording and the playback picture will be extremely snowy with good sound. If this happens have the unit checked by qualified service personnel.

### VIDEO HEAD CLEANING

Manual head cleaning is needed if the picture on playback is still unclear although the picture on program is normal. This failure signifies that the head is getting dirty and can occur when playing poor quality or damaged tapes. If the heads require cleaning, use a high quality head-cleaning cassette or have them cleaned professionally.

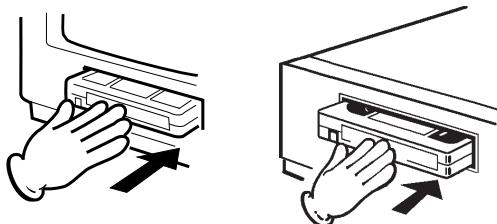
### NOTES:

- Video heads may eventually wear out and should be replaced when they fail to produce clear pictures.
- To help prevent video head cleaning, use only good quality VHS tapes. Discard worn tapes.

# DUPLICATING A VIDEO TAPE

If you connect the unit to another VCR or VIDEO CAMERA, you can duplicate a previously recorded tape. Make all connections before turning on the power.

- 1 Load a blank cassette tape with the erase prevention tab intact into the unit (these instructions show how to use this unit as the recording, rather than the playback device). Load a previously recorded tape into the playback VCR or VIDEO CAMERA.



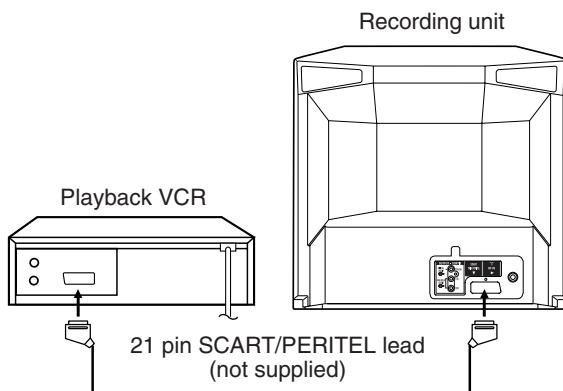
- 2 Depending on the device that you are recording from, you can use either the SCART socket at the rear or the Front AV Input sockets. Press the AV button once until "AV1" appears for recording through the SCART socket or twice until "AV2" appears for recording through the Front AV Inputs.

- 3 Press **REC/OTR** on the remote control of the unit, then press **PAUSE/STILL**.

- 4 Press the **PLAY** button on the playback VCR, then press the **PAUSE** button.

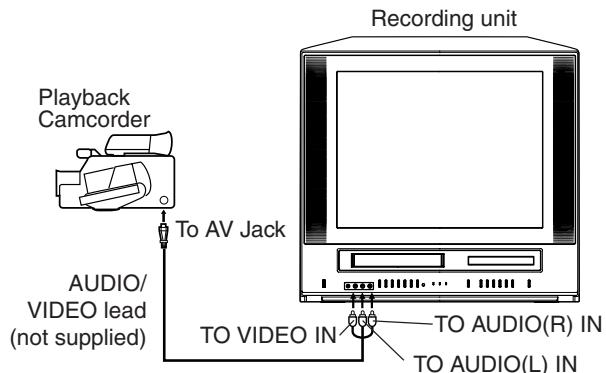
- 5 Release the Recording Pause and Still Playback to begin the duplicating process.

## CONNECTION TO ANOTHER VCR



## CONNECTION TO CAMCORDER

For duplicating a previously recorded tape from a camcorder, follow the camcorder manufacturer's instructions. A typical camcorder dubbing hookup is shown below.



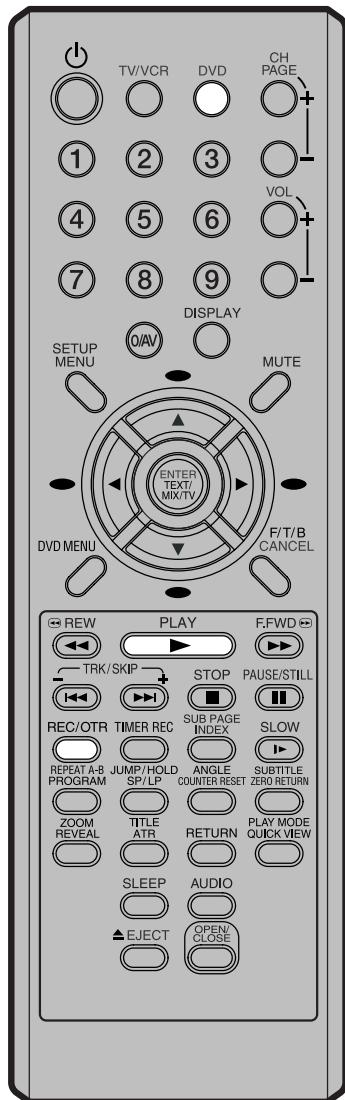
### NOTES:

- It is recommended that the tape speed be set to the SP mode on the unit for best results.
- Unauthorized recording of copyrighted television programs, films, video cassettes and other materials may infringe the rights of copyright owners and be contrary to copyright laws.

# DUPLICATING FROM DISC TO VIDEO TAPE

With this unit it is theoretically possible to record from a DVD or Audio CD to a video tape.

If the DVD disc has a Copy-guard feature, the duplication is not possible. A symbol mark “” will appear on the screen for approx. 4 seconds. See page 36 for more information about DVD discs.



## Preparation

- Load a cassette tape with the erase prevention tab intact.
- Select the tape speed in the TV/VCR mode. (see P.24)
- Load a disc you wish to duplicate.

**1** Press **DVD** to select the DVD mode.

**2** Press **PLAY** to start the disc playback.

**3** During disc playback, press **REC/OTR**.

## NOTES:

- You can set the duplicating time using the OTR-function. At step 3 above press **REC/OTR** repeatedly until the desired duplicating time appears on the screen. (P.27)
- Unauthorized recording of copyrighted television programs, films, video cassettes and other materials may infringe the rights of copyright owners and be contrary to copyright laws.

# TELETEXT

Most broadcasters offer a Teletext service in addition to their standard TV programmes.

Teletext offers news, weather forecast, winning Lotto numbers, TV listings and other interesting news.

The text is received page by page, as soon as you select the broadcasting station. A single page can be displayed on the screen. The pages are numbered and broadcasted one by one. Therefore you'll have to wait a certain time until the selected page is displayed on the screen. The page will be displayed as soon as it is broadcast.

Certain pages can be displayed more easily by pressing one of the four coloured **FASTEXT** buttons.

## Basic operation

**1** Select the broadcasting station, whose text you want to read. In order to do so, select the station's channel with the remote handset.

**2** Push **TEXT/MIX/TV**.

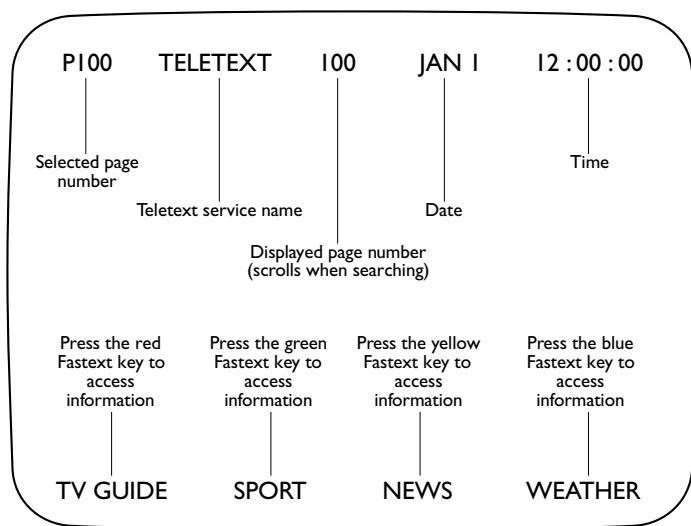
The first push on **TEXT/MIX/TV** button switches the Teletext on.

The second push on **TEXT/MIX/TV** displays the TV program and the Teletext together (MIX).

The third push on **TEXT/MIX/TV** switches the Teletext off and returns the screen back to the TV program.

The first operation of the teletext normally opens the page 100 with the table of contents.

Example for a teletext page:



Select the desired teletext page from the broadcasting station's table of contents.

## HOLD

Some pages hold more text than can be displayed on one page. The broadcasting station separates these pages into sub-pages, which are broadcasted one by one automatically. To study one sub-page thoroughly push **HOLD**.

The **HOLD**-symbol will be displayed.

The associated sub-pages will scroll through automatically, when you push **HOLD** a second time to release it.

# TELETEXT

## To call a teletext page

Leaf through the pages with **PAGE (+/-)** (forward or backward).

**NOTE:** You will not necessarily find a page for every page number you enter. E.g. you might enter page no.116 but there may or may not be a page no.116. Available page numbers can be found on the Index page (this will be page 100 on most stations).

Enter the three-digit page number with the number buttons.

Example:

You want to display page 300.

Enter: 3 then 0 and 0.

If you enter an incorrect digit, complete all three digits with any numbers, then you can enter the correct page number.

Inside the teletext mode you cannot change to another broadcasting station.

To switch to another channel, leave the teletext mode by pressing **TEXT/MIX/TV**.

## How to call a specific sub-page

Push **SUB PAGE** (0000).

The screen's lower left corner will display: **----**

To call sub-page 2 enter: **0 0 0 2**.

Your input will be displayed in the lower left corner: **0002**.

It may take some time until sub-page 2 is broadcast.

The sub-page can only be displayed when the broadcaster transmits it.

To leave sub-page mode push **SUB PAGE** again.

Within the sub-page mode no other pages other than the sub-pages of the selected page can be called. To call other teletext pages you must leave the sub-page mode.

## Magnifying

To magnify the letters push **F/T/B**.

You can magnify either the upper or the lower half of the screen.

Each push on the F/T/B button switches between the screen's upper and lower half and the full screen.  
(F/T/B = Full / Top / Bottom)

## REVEAL

Pushing **REVEAL** will give you the hidden answers to the questions on a Quiz-page.

Not every broadcasting station offers Quiz-pages and they are not constantly offered.

# DISC

DVD discs must be Region 4 or Region ALL type to play on this unit.

The loaded Disc (DVD, Audio-CD and MP3/JPEG-CD) will be recognized automatically.

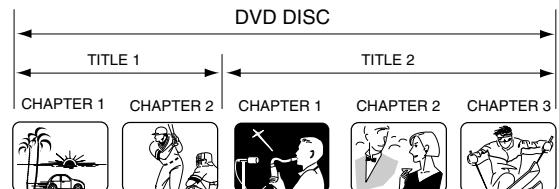
The suitable disc formats are: DVD-Video, CD, CD-R, DVD-R/RW (Video format only) and CD-RW.

Some CD-R/RW discs may be incompatible.

Do not play DVD-ROM, DVD-Audio, CDV, CD-G or Photo CD to prevent accidental erasure of prerecorded material.

## Title

When two or more movies are recorded on a disc, the disc is divided into two or more sections. Each section is called a "TITLE".



## Chapter

The titles can be subdivided into many sections. Each section is called a "CHAPTER".

## Track

An Audio CD can contain several items. These are assigned to tracks.



## Removing Disc from Case

Be sure to hold the edge of disc. Do not touch the surface of the disc.

Pick up the disc gently from the case.

- Do not scratch the disc.
- Do not get dirt on the surface of the disc.
- Do not stick a label or adhesive tape on the disc.
- Do not drop or bend the disc.

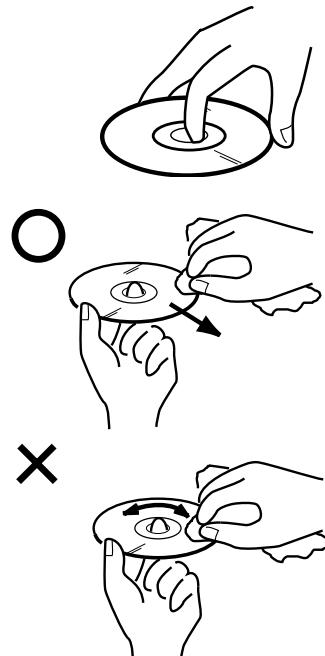
## Storing Disc

- Store the disc in the case to avoid risk of scratches, dirt or damage.
- Do not leave disc exposed to direct sunlight or in hot or humid places.

## Cleaning Disc

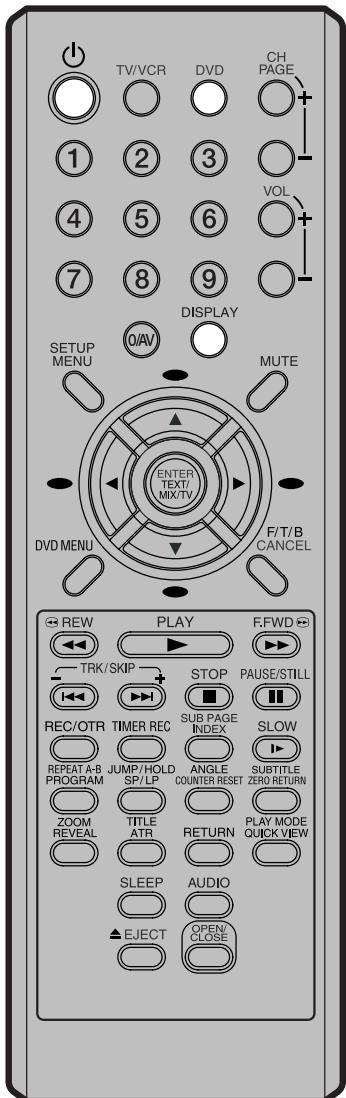
Wipe the disc with a clean, dry cloth from center to edge.

- Do not wipe in circular direction.
- Do not use liquid or aerosol cleaners.



# PREPARATION/STATUS DISPLAY OF DISC

The following pages describe the setup/operation in DVD mode.



## Preparation

Before DVD/CD operation, please make preparations as follows.

**1** Insert the AC cord plug into a standard 240V 50Hz AC outlet.

- If the AC cord plug is plugged in for the first time, wait for about 5 seconds before pressing POWER (ON) on the front.

**NOTE:** When connecting to other equipment, unplug the unit from the AC outlet.

**2** Press **Sub Power** (⊕) on the unit or on the remote control to turn on the unit.

- Every time you press **Sub Power** (⊕), the unit starts from TV mode.
- When using an amplifier, switch on the amplifier.

**3** Press **DVD** to select DVD mode.

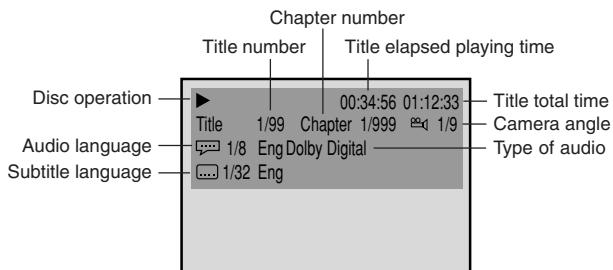
The DVD startup screen will appear on the screen.



## Status display of disc

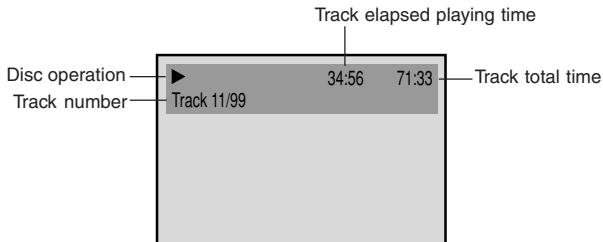
Press **DISPLAY** twice. The status display of the disc will appear on the screen during playback.

### DVD



To make status display disappear, press **DISPLAY** again.

### Audio CD



- When you play the CD disc, the status display will appear on the screen and continue displaying.

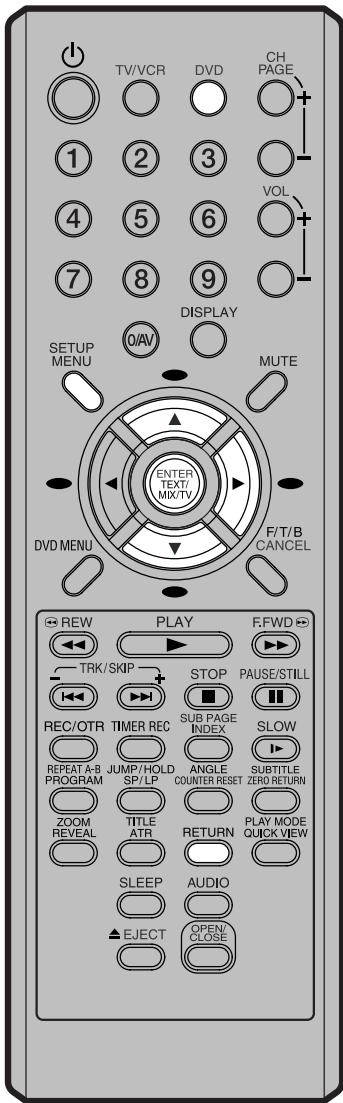
### NOTE:

#### If the unit does not operate properly:

Static electricity can adversely affect the operation of this player. Sometimes this can be remedied by unplugging the unit for a short time, then reconnecting it.

# SETTING SETUP LANGUAGE

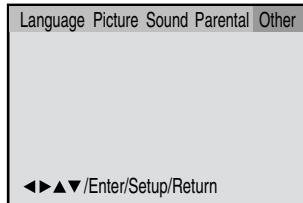
You can change the default settings to customize performance to your preference.



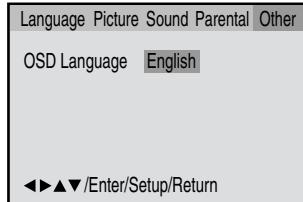
1 Press **DVD** to select the DVD mode.  
“No Disc” will appear on the screen. (If a DVD disc has already loaded, the playback will start automatically.)



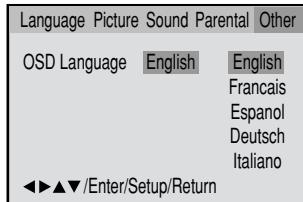
2 Press **SETUP** in the stop mode. The SETUP MENU of DVD will appear on the screen.  
Then press **▶** to select Other.



3 Press **▼** or **ENTER** to select OSD Language.



4 Press **▶** or **ENTER** and then press **▲** or **▼** to select desired language (e.g. English), then press **ENTER**.

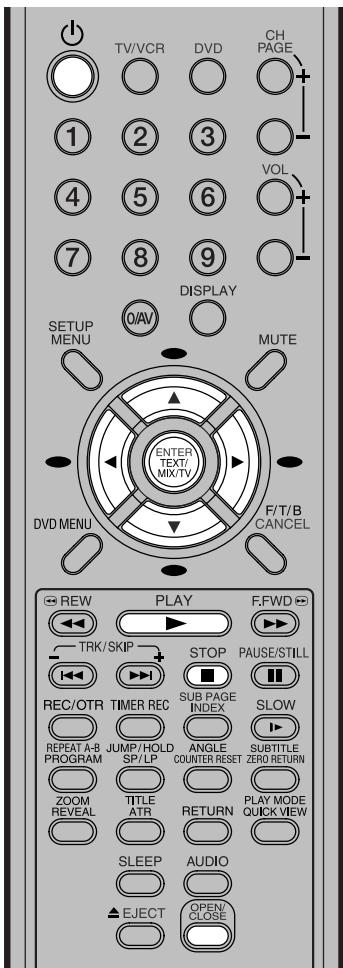


5 Press **SETUP** or **RETURN** to remove the Menu screen.

## NOTES:

- If the selected soundtrack language is not recorded on the disc, the original language will be heard.
- If the selected subtitle language is not recorded on the disc, the first-priority language is selected.

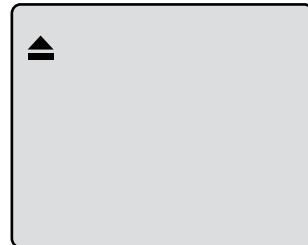
# PLAYBACK PROCEDURE



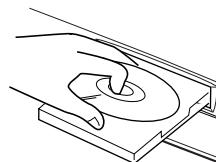
## NOTES:

- If a non-compatible disc is loaded, "Incorrect Disc", "Region Code Error" or "Parental Error" will appear on the TV screen according to the type of loaded disc. If these appear, check your disc again (see pages 36 and 52).
- Some discs may take a minute or so to start playback.
- A "Prohibition" symbol  may appear at the upper left of the screen. This symbol means either the feature you tried is not available on the disc, or the unit cannot access the feature at this time. This does not indicate a problem with the unit.
- When you set a single-faced disc label downwards (i.e. the wrong way up) and press **PLAY** or **OPEN/CLOSE** on the unit, "Reading" will appear on the display and then "Incorrect Disc" will be displayed.
- Some playback operations of DVDs may be intentionally fixed by software producers. Since this unit plays DVDs according to the disc contents the software producers designed, some playback features may not be available. Also refer to the instructions supplied with the DVDs.

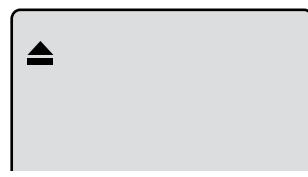
1 Press **OPEN/CLOSE** on the unit or the remote control.  
The disc tray will open.



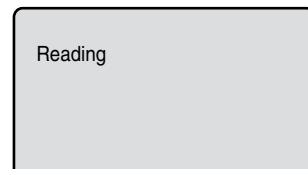
2 Place a disc onto the tray. Position it with the printed label side up, align it with the guides, and place it in its proper position.



3 Press **PLAY** or **OPEN/CLOSE**.  
The disc tray closes automatically.  
On the screen,  changes to "Reading" and then playback will commence.



- A menu screen may appear on the TV screen, if the disc has a menu feature. In this case, press  or **ENTER** to operate a menu feature.



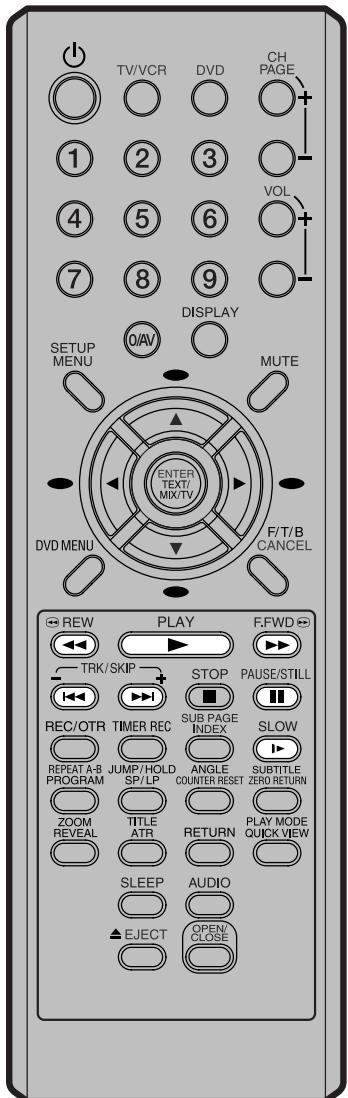
4 Press **STOP** to end playback.

- The unit memorizes the stopped point, depending on the disc.  appears on the screen for approx. 4 seconds. Press **PLAY** to resume playback (from the stopped point).
- If you press **STOP** again ( appears on the screen) or unload the disc, the unit will clear the stopped point.

5 Then press **OPEN/CLOSE**.  
The disc tray opens.  
Remove the disc and press **Sub Power** ().  
The disc tray closes automatically and the unit turns off.

# SPECIAL PLAYBACK

**NOTE:** There may be a slight delay between when you press the button and the function activating.



## NOTE:

The unit is capable of holding a still video image or On screen display image on your television screen indefinitely. If you leave the still video image or On screen display image displayed on your TV for an extended period of time, you risk permanent damage to your television screen. Projection televisions are very susceptible.

## Fast Forward Playback

Press **F.FWD ►►** during normal playback.

Each press of the **F.FWD ►►** button will increase the speed of the search ►► (x 2), ►►► (x 4), ►►►► (x 8), ►►►►► (x 15). (CD: ►► (x 2), ►►► (x 4), ►►►► (x 8), ►►►►► (x 20))

- To resume normal playback, press **PLAY**.

## Review Playback

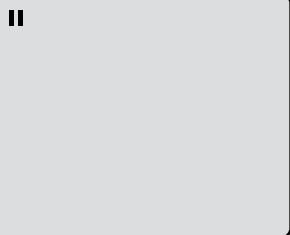
Press **REW ◀◀** during normal playback.

Each press of the **REW ◀◀** button will increase the speed of the search ◀◀ (x 2), ◀◀◀ (x 4), ◀◀◀◀ (x 8), ◀◀◀◀◀ (x 15). (CD: ◀◀ (x 2), ◀◀◀ (x 4), ◀◀◀◀ (x 8), ◀◀◀◀◀ (x 20))

- To resume normal playback, press **PLAY**.

## Still Playback

Press **PAUSE/STILL** during normal playback to pause playback.



- To resume normal playback, press **PLAY**.

## Frame Advance

Press **PAUSE/STILL** during still playback.

One frame is advanced each time you press **PAUSE/STILL**.

- To resume normal playback, press **PLAY**.

## Slow-motion Playback

Press **SLOW ►** during normal playback or still playback. Each press of **SLOW ►** will change the speed of the slow x1/2, x1/4, x1/6, x1/7.

- To resume normal playback, press **PLAY**.
- To resume the still playback, press **PAUSE/STILL**.

## Locating a chapter or track

Press **SKIP(►►)** Forward or **SKIP(◀◀)** Reverse during playback to locate a chapter that you want to watch. Each time you press the button, a chapter or track is skipped.

# MP3/JPEG PLAYBACK

This player can play back the MP3/JPEG-data which has been recorded on CD-R or CD-RW. To produce the MP3/JPEG-data, you need a Windows-PC with CD-R/RW drive and a MP3/JPEG-encoding Software (not supplied). The Apple-HFS-System cannot be played.

## MP3/JPEG CD information

### Limitations on MP3/JPEG CD playback

- MP3/JPEG CD is the disc that is standardized by ISO9660, its file name must include 3-digits extension letters, "mp3", "jpg".
- The directory and file names of the MP3/JPEG CD must be correspond to the ISO standardized files.
- This unit can read 200 files per disc. If one directory has more than 200 files, it reads up to 200 files, the remaining files will be omitted.
- The unit is able to recognize up to a maximum of 50 directories per disc.
- MP3/JPEG CDs cannot be used for playback for the purpose of recording.
- If the CD has both audio tracks and MP3/JPEG files, only audio tracks are played.
- It may take more than one minute for this unit to read MP3/JPEG files depending on its structure.
- Music recorded by "Joliet Recording Specification" can be played back, the file name is displayed (within 16 letters) on the screen Long file names will be condensed.
- The music files recorded by "Hierarchical File System" (HFS) cannot be played.

### Limitations on display

- The maximum number for display is 16 letters. Available letters for display are the following: capital or small alphabets of A through Z, numbers of 0 through 9, and \_ (under score).
- Other letters than those above are replaced in hyphen.

### Notes on MP3/JPEG files

To play back MP3/JPEG CD in the recorded order,

1. Use MP3/JPEG software that records data alphabetically or numerically.
2. Name each file including two-digit or three-digit number (e.g. "01" "02" or "001" "002").
3. Refrain from making too many sub-folders.

### CAUTION:

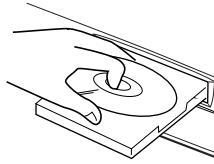
- Some MP3/JPEG CDs cannot be played back depending on the recording conditions.
- The CD-R/RW that has no music data or non-MP3/JPEG files can not be played back.

## MP3/CD playback

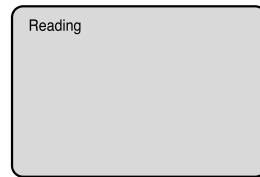
1 Press **OPEN/CLOSE**.

The disc tray will open.

Place a disc on which MP3 files have been recorded onto the tray.

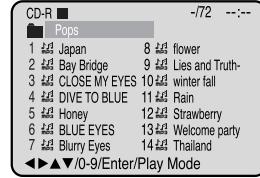


2 Press **OPEN/CLOSE** or **PLAY**. The disc tray closes automatically. On the TV-screen, "Reading" will appear. Reading will take as much time as the number of file.



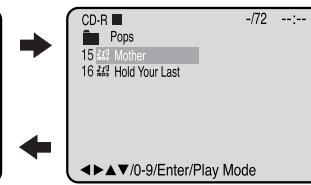
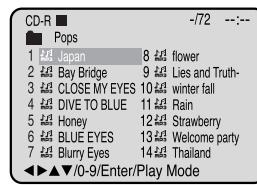
3 A file menu screen will appear on the TV screen.

Press **◀/▶** to select folder.



4 Press **▲/▼** or **◀/▶** or **Number keys** to select the desired file.

• In case the folder includes more than 15 files, press **◀** or **▶** to display next file list.



• When **PLAY** has been pressed after displaying the file menu, or when the disc tray has been closed after pressing **PLAY** in step 2, playback begins automatically starting from the first file. In this case, if the first file is an MP3 file, only MP3 files are played back in order. If the first file is a JPEG file, the first JPEG file is played back.

5 Press **ENTER**.

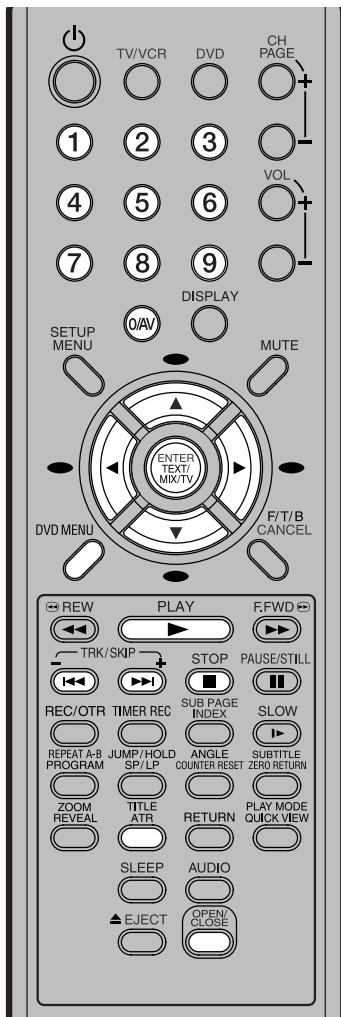
The selected file starts playing back.

6 Press **STOP** to end playback.

- The unit records the stopped point. "■" appears on the screen. Press **PLAY** to resume playback (from the scene point).
- If you press **STOP** again or unload the disc, the unit will clear the stopped point.

### NOTES:

- During MP3/JPEG-Playback, you cannot use SEARCH, A-B Repeat functions.
- You can use Repeat (Track or All), Random functions and Program playback for MP3/JPEG CD Playback (see pages 46 and 47).
- In the case of a CD containing a mixture of MP3 and JPEG files, the files are played back by selecting them from the file menu.



#### About file menu

Media type	Operation	Elapsed time	
		File number	
CD-R		1/94	02:36
Folder			
	CD-R Pops		
	1  Japan	8  flower	
	2  Bay Bridge	9  Lies and Truth-	
	3  CLOSE MY EYES	10  Pic-1	
	4  DIVE TO BLUE	11  Pic-2	
	5  Honey	12  Pic-3	
	6  BLUE EYES	13  Pic-4	
	7  Blurry Eyes	14  Pic-5	

: Indicates MP3 file

: Indicates JPEG file

#### NOTES:

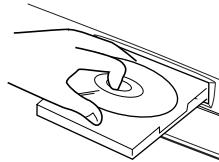
- The picture menu is displayed when the FUJICOLOR CD or the KODAK Picture CD are played. To display the file menu press **TITLE**.
- MP3 file on the KODAK Picture CD is not recognized on this unit.

#### JPEG CD playback

1 Press **OPEN/CLOSE**.

The disc tray will open.

Place a disc on which JPEG files have been recorded onto the tray.

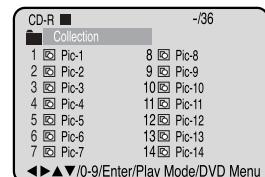
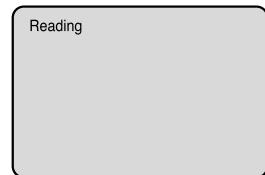


2 Press **OPEN/CLOSE** or **PLAY**.

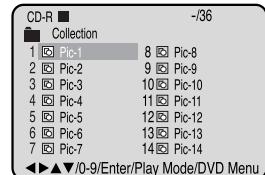
The disc tray closes automatically. On the TV-screen, "Reading" will appear. Reading will take as much time as the number of file.

3 A file menu screen will appear on the TV screen.

Press **◀/▶** to select folder.



4 Press **▲/▼** or **◀/▶** or **Number keys** to select the desired file.



To display a picture menu, press **DVD MENU**. (To return to a file menu, press **TITLE**.)

Press **▲/▼** or **◀/▶** to select the desired file.

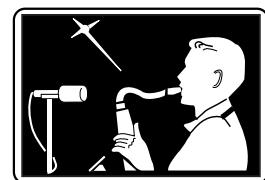
- To display next list, press **SKIP** **▶▶/◀◀**.

- When **PLAY** has been pressed after displaying the file menu, or when the disc tray has been closed after pressing **PLAY** in step 2, playback begins automatically starting from the first file. In this case, if the first file is a JPEG file, the first JPEG file is played back. If the first file is an MP3 file, only MP3 files are played back in order.



5 Press **ENTER**.

The selected picture appears on the TV screen.



6 Press **STOP** to end playback.

The file menu appears on the TV screen.

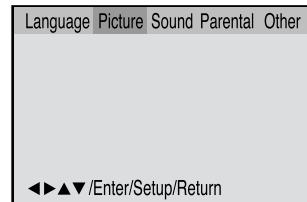
If you want to watch the other file, repeat steps 4-5.

# SETTING THE JPEG INTERVAL

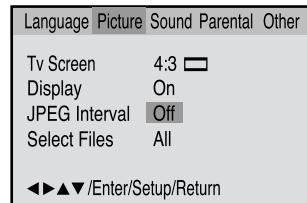
## Setting the JPEG Interval

You can continuously play back all JPEG files automatically.

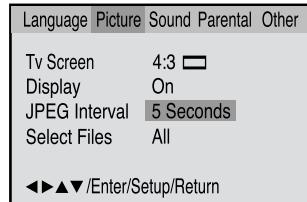
- 1 Press **SETUP** in the stop mode.  
Press **◀/▶** to select “Picture”, then press **ENTER**.



- 2 Press **▲** or **▼** to select “JPEG Interval”.



- 3 Press **ENTER** or **◀/▶** to select your desired time.



### 5 Seconds:

Plays back images in the form of a slide show at 5 second intervals.

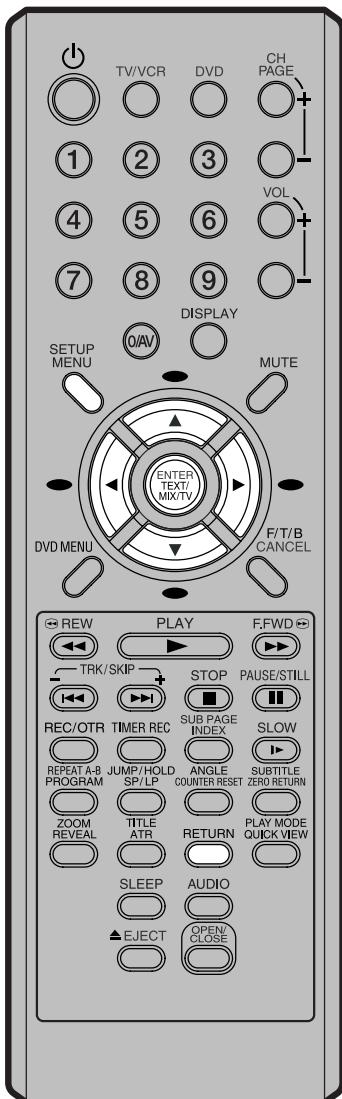
### 10 Seconds:

Plays back images in the form of a slide show at 10 second intervals.

### 15 Seconds:

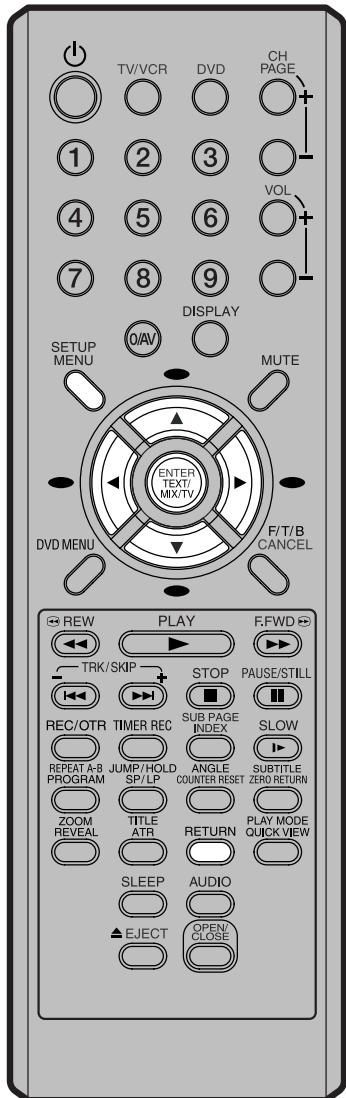
Plays back images in the form of a slide show in 15 second intervals.

- 4 To make SETUP screen disappear, press **SETUP** or **RETURN**.



# SETTING THE SELECT FILES

When playing back a CD containing a mixture of MP3 and JPEG files, only MP3 or JPEG files can be displayed on the file menu.



1 Press **SETUP** in the stop mode.  
Press **◀/▶** to select "Picture",  
then press **ENTER**.

Language Picture Sound Parental Other

◀▶▲▼ /Enter/Setup/Return

2 Press **▲** or **▼** to select "Select Files".

Language Picture Sound Parental Other

Tv Screen 4:3  
Display On  
JPEG Interval Off  
Select Files All

◀▶▲▼ /Enter/Setup/Return

3 Press **ENTER** or **◀/▶** to select your desired file type.

**All:**

Displays all files.

**Music Only:**

Displays only MP3 files.

**Pictures Only:**

Displays only JPEG files.

Language Picture Sound Parental Other

Tv Screen 4:3  
Display On  
JPEG Interval Off  
Select Files Pictures Only

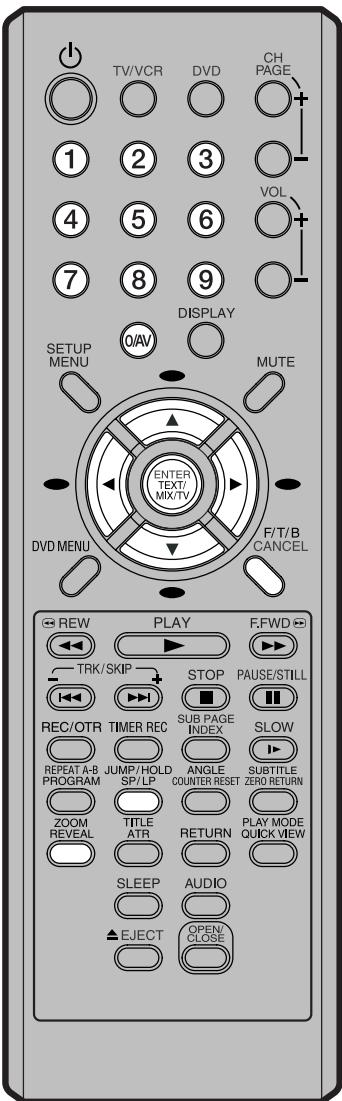
◀▶▲▼ /Enter/Setup/Return

4 To make SETUP screen disappear, press **SETUP** or **RETURN**.

# ZOOMING/LOCATING DESIRED SCENE

## Zooming

This unit will allow you to zoom in on the frame image. You can then make selections by switching the position of the frame.



1 Press **ZOOM** during playback.  
The centre part of the image will be zoomed in.  
Each press of **ZOOM** will change the ZOOM **Q** 1 (x 2), **Q** 2 (x 3) and **Q** 3 (x 4).

**Q 1**

2 Press **▲/▼/◀/▶** to view a different part of the frame.  
You may move the frame from the centre position to UP, DOWN, LEFT or RIGHT direction.

3 In the zoom mode press **ZOOM** repeatedly to return to a 1:1 view (**Q** Off).

## Locating Desired Scene

Use the title, chapter and time recorded on the disc to locate the desired point to play back.

1 Press **JUMP** during playback.

Jump	Time	:	---	---
Title	:	---	---	---
Chapter	:	---	---	---

**▲▼/Enter/0-9/Cancel/Jump**

2 Press **▲** or **▼** to select the "Time", "Title" or "Chapter".

3 Press **Number buttons (0-9)** to input the number.

- If you input a wrong number, press **CANCEL**.
- Refer to the package supplied with the disc to check the numbers.

4 Press **ENTER**.

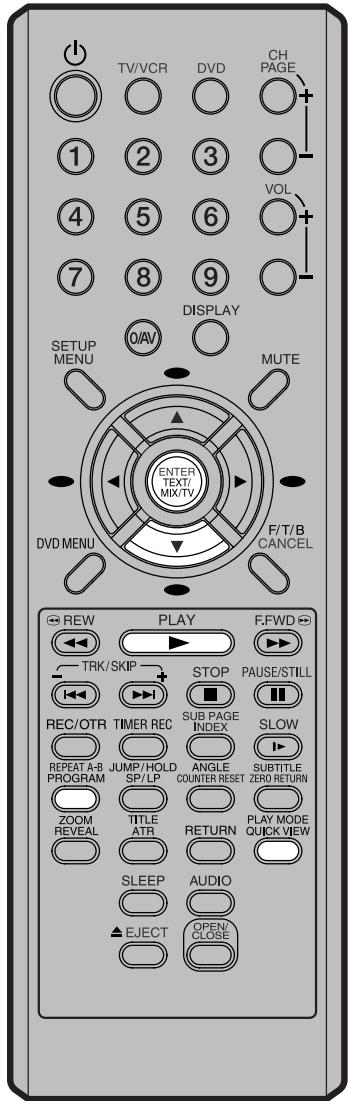
- Playback starts.
- When you change the title, playback starts from Chapter 1 of the selected title.
- Some discs may not work in the above operation.

## NOTES:

- You can select the Pause, Slow or Search playback in the zoom mode.
- Some discs may not respond to the zoom feature.

# REPEAT PLAYBACK

## Title, Chapter, Track Playback



### NOTES:

- Some discs may not work with the repeat operation.
- In A-B repeat mode, subtitles near point A or B may not appear.
- During the A-B Repeat Playback the ANGLE feature will not operate.
- You may not be able to set A-B Repeat, depending on the scenes of the DVD.
- A-B Repeat does not work with an interactive DVD, MP3/JPEG CD.

1 Press **PLAY MODE** during playback or stop mode.

### DVD

Repeat : Off  
◀▶/Enter/Play Mode

### CD

Play Mode : Off  
Repeat : Off  
◀▶◀▶/Enter/Play Mode

2 Press **ENTER** once or twice to select "Chapter" or "Title".  
In case of CD, at first press **▼** to select "Repeat" and then press **ENTER** once or twice to select "Track" or "All".

### DVD

Repeat : Chapter  
◀▶/Enter/Play Mode

### CD

Play Mode : Off  
Repeat : All  
◀▶◀▶/Enter/Play Mode

3 Press **PLAY MODE** again to make the screen disappear.

- Press **PLAY** to start Repeat playback.
- To resume normal playback, select Repeat Off.

## A-B Repeat Playback

**A-B repeat playback allows you to repeat material between two selected points.**

1 Press **REPEAT A-B** during playback.  
The start point is selected.

■ A-

2 Press **REPEAT A-B** again.  
The end point is selected.  
Playback starts at the point that you selected. Playback stops at the end point, returns to Point A automatically, then starts again.

■ A-B

To resume normal playback press **REPEAT A-B** again.  
"■ Off" appears on the screen.

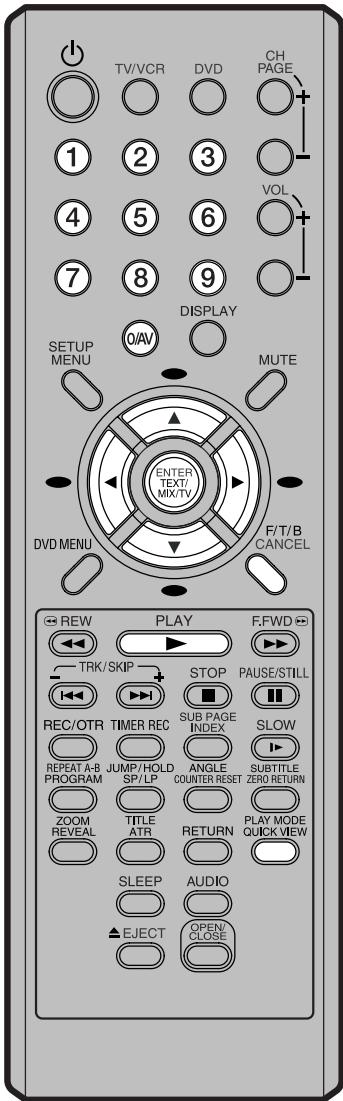
# PROGRAM PLAYBACK/RANDOM PLAYBACK (CD)

## Program playback

You can arrange the order of tracks on the disc.

1 Press **PLAY MODE** in the stop mode.

Play Mode : Off  
Repeat : Off  
◀▶▲▼ /Enter/Play Mode



2 Press **ENTER** repeatedly until the program table shown at right appears.

Play Mode : Program  
Repeat : Off  
1 --- 4 --- 7 --- 10 ---  
2 --- 5 --- 8 --- 11 ---  
3 --- 6 --- 9 --- 12 ---  
Clear Program Playback  
◀▶▲▼ /Enter/0-9/Cancel/Play Mode

3 **Example:** In case you wish to program in order of 7, 3, 11:  
Enter as 7 ▼, 3 ▼, 11.

If you input a wrong number, press **CANCEL**.

Play Mode : Program  
Repeat : Off  
1 7 --- 4 --- 7 --- 10 ---  
2 3 --- 5 --- 8 --- 11 ---  
3 11 --- 6 --- 9 --- 12 ---  
Clear Program Playback  
◀▶▲▼ /Enter/0-9/Cancel/Play Mode

4 Press ▲/▼ or ▲/▼ to select "Program Playback" and press **ENTER**. "Program Playback" will appear on the screen. The program you selected will begin to playback in the order set. To return to normal playback, select "Play Mode: Off" at step 2 above.

Program Playback 02:31 08:29  
Track 7/11

## Random playback

1 Press **PLAY MODE** during playback or stop mode.

Play Mode : Off  
Repeat : Off  
◀▶▲▼ /Enter/Play Mode

2 Press ▲/▼ or **ENTER** to select "Random".

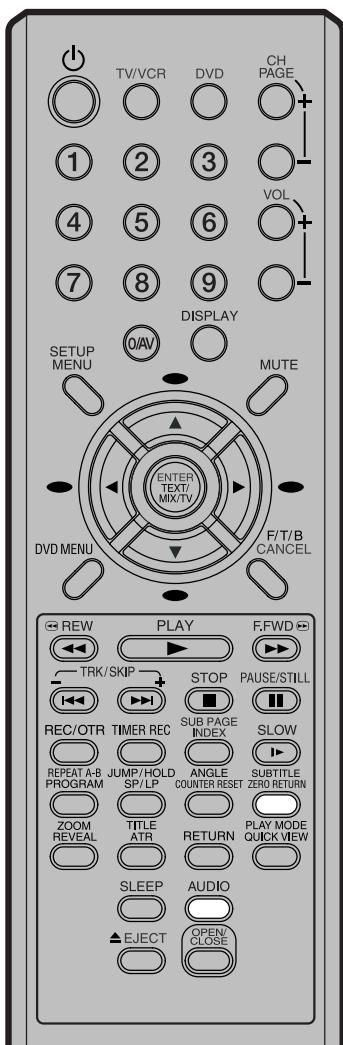
Play Mode : Random  
Repeat : Off  
◀▶▲▼ /Enter/Play Mode

3 Press **PLAY**. "Random Play" will appear on the screen and Random Playback will start.

### NOTES:

- To cancel program play, select "Clear" at step 4 and press **ENTER**.
- The program is cancelled when you open the disc tray or turn the power off.
- Random playback can not be combined with Repeat playback.

# CHANGING SOUNDTRACK LANGUAGE/SUBTITLES



## Changing soundtrack language

You can select the language when you play a multilingual disc.

- 1 Press **AUDIO** during playback.



The current soundtrack language will appear.

- 2 Press **AUDIO** repeatedly until the desired language is selected.



The on-screen display will disappear after a few seconds.

## Subtitles

### Turning the Subtitles On and Off

When playing back a disc recorded with subtitles, you can turn the subtitles on or off.

Press **SUBTITLE** during playback until "Off" appears.



## Changing the subtitle language

You can select the language when playing back a disc recorded with multi-lingual subtitles.

- 1 Press **SUBTITLE** repeatedly during playback until your desired language appears.



- 2 The on-screen display will disappear after a few seconds.

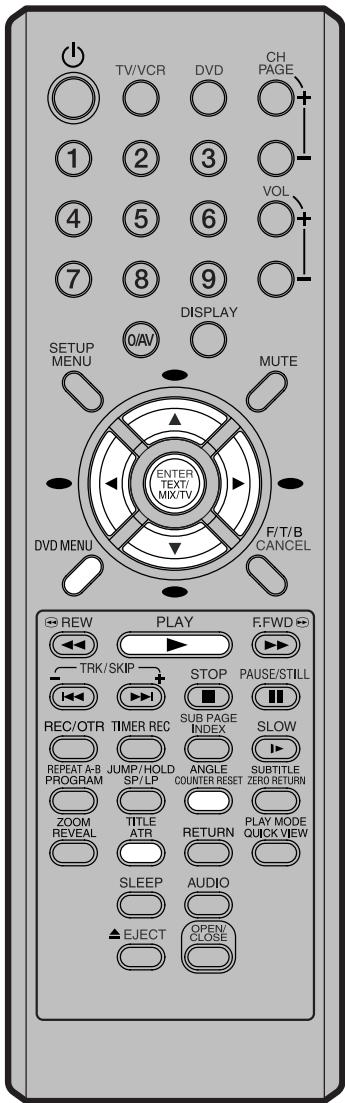
### NOTES:

- If the desired language is not heard after pressing the **AUDIO** button several times, the language is not recorded on the disc.
- Changing soundtrack language is cancelled when you open the disc tray. The initial default language or available language will be heard if the disc is played back again.
- Changing subtitle language is cancelled when you open the disc tray.
- Some functions may not work on some DVDs. You may not be able to turn subtitles on or off or change subtitles. While playing the DVD, the subtitle may change when:
  - you open or close the disc tray.
  - you change the title.
- In some cases, the subtitle language is not changed to the selected one immediately.

# CHANGING ANGLES/TITLE SELECTION/DVD MENU

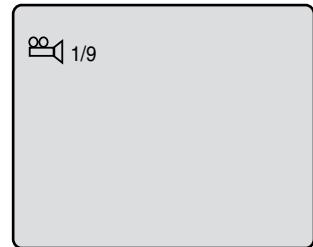
## Changing Angles

When playing back a disc recorded with multi-angle facility, you can change the viewing angle.



1 Press **ANGLE** during playback.

The current angle will appear.



2 Press **ANGLE** repeatedly until the desired angle is selected.

## Title Selection

Two or more titles are recorded on some discs. If the title menu is recorded on the disc, you can select the desired title.

1 Press **TITLE** during playback.  
Title menu appears on the screen.

2 Press **▲/▼** or **◀/▶** to select the desired title.  
3 Press **ENTER** or **PLAY**.  
The playback of the selected title will start.

## DVD Menu

Some DVDs allow you to select the disc contents using the menu.

When you play back these DVDs, you can select the subtitle language and soundtrack language, etc. using the DVD menu.

1 Press **DVD MENU** during playback.  
The DVD menu appears on the screen.

- Press **DVD MENU** again to resume playback at the scene when you pressed **DVD MENU**.

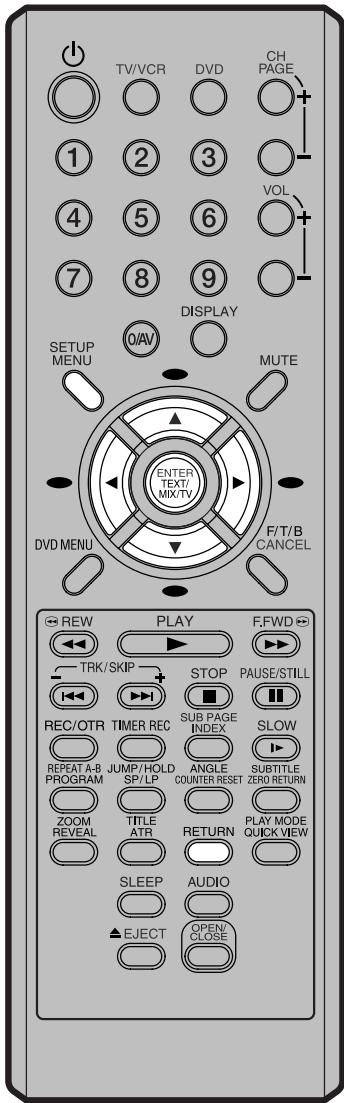
2 Press **▲/▼** or **◀/▶** to select the desired item.

3 Press **ENTER**.  
The menu continues to another screen. Repeat steps 2 and 3 to set any additional items.

### NOTES:

- Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the DVD.
- Depending on the DVD, you may not be able to select the title. Depending on the DVD, a "title menu" may simply be called a "menu" or "title" in the instructions supplied with the disc.

## SETTING THE ASPECT RATIO OF TV SCREEN/SETTING ON SCREEN DISPLAY



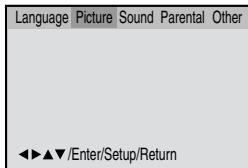
### NOTE:

It is not always possible for the DVD disc to display the picture as per your preferred picture setting - for example, if you select "4:3 Panscan", the disc may not offer this option. In this case the picture would display in whichever format the disc is capable of playing back.

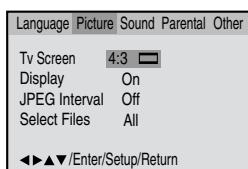
### Setting the aspect ratio of TV screen

You can select the aspect ratio of the picture.

- 1 Press **SETUP** in the stop mode.  
Press **◀** or **▶** to select "Picture".

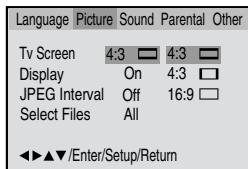


- 2 Press **▼** or **ENTER**, then press **▲** or **▼** to select "Tv Screen".



- 3 Press **▶** or **ENTER**.

Press **▲** or **▼** to select your desired screen type, then press **ENTER**.



You have the following screen sizes to choose from:

#### 4:3 Letterbox

When playing back a wide screen-DVD disc, it displays the wide picture with black bands at the top and bottom of screen.

#### 4:3 Panscan

It displays the wide picture on the whole screen with left and right edges automatically cut off.

#### 16:9 Wide screen

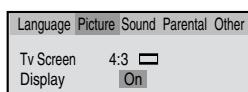
A wide screen picture is displayed full size, although the image on the screen may be geometrically distorted in this mode because the TV screen has an aspect ratio of 4:3 not 16:9. However it is possible to connect this set to an external widescreen (16:9) TV set via the SCART socket (see P.9).

- 4 Press **SETUP** or **RETURN** to remove the Menu screen.

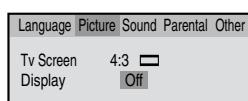
### Status on screen display

On screen display can be switched on or off when you press the **DISPLAY** button.

- 1 Press **SETUP** in the stop mode or No Disc.  
Press **◀** or **▶** to select "Picture".



- 2 Press **▼** or **ENTER**, then press **▲** or **▼** to select "Display".



- 3 Press **▶** or **ENTER** to select "On" or "Off".

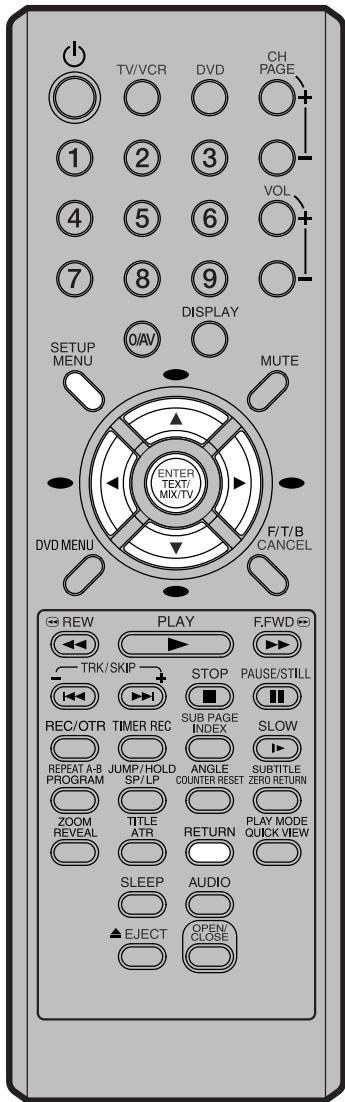
**On:** On screen displays appear when you press the buttons (factory setting).

**Off:** On screen displays do not appear when you press any buttons except **SETUP**, **SEARCH MODE**, **PLAY MODE** and **DISPLAY**.

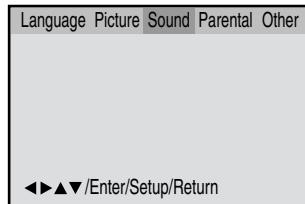
- 4 Press **SETUP** or **RETURN** to remove the Menu screen.

# DYNAMIC RANGE CONTROL

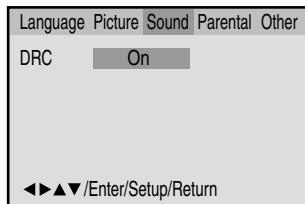
**DRC (Dynamic Range Control)** enables you to control the dynamic range so as to achieve a suitable sound for your equipment.



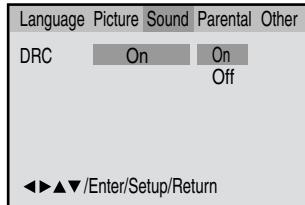
1 Press **SETUP** in the stop mode or No Disc. Press **◀** or **▶** to select "Sound".



2 Press **▼** or **ENTER** to select "DRC".



3 Press **▶** or **ENTER**, then press **▲** or **▼** to select desired setting.



**On:** Dynamic range is on.

**Off:** Dynamic range is off.

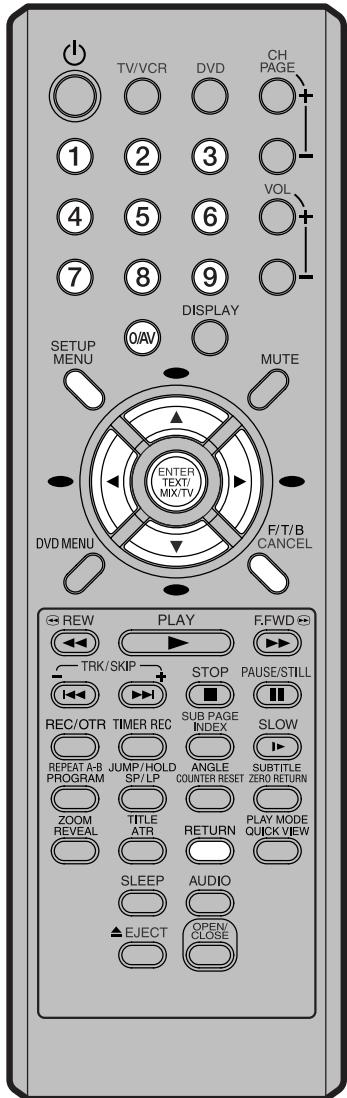
4 Press **SETUP** or **RETURN** to remove the Menu screen.

## NOTES:

- This function works only during playback of Dolby Digital recorded discs.
- The level of Dynamic Range Reduction may differ depending on DVD video disc.

# PARENTAL CONTROL SETTING

Some discs are specified not suitable for children. Such discs can be limited not to play back with the unit.

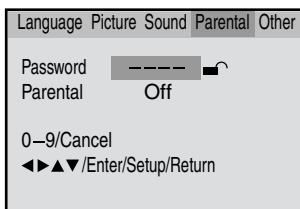


## NOTES:

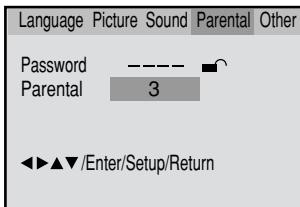
- If each setup (P.38,43,44,50~53, 55~57) has been completed, the unit can always be worked under the same conditions (especially with DVD discs).
- Each setup will be retained in the memory when you turn the power off.
- Depending on the discs, the unit cannot limit playback.
- Some discs may not be encoded with specific rating level information though its disc jacket says "adult." For those discs, the age restriction will not work.

1 Press **SETUP** in the stop mode or No Disc.

Press **◀** or **▶** to select "Parental". Then press **▼** or **ENTER**.



2 Press **▲** or **▼** to select "Parental", then press **◀** or **▶** until the level you require appears.

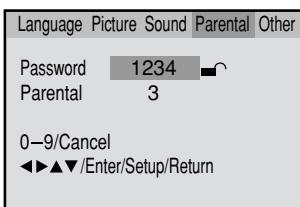


- **Level Off:** The parental control setting does not function.
- **Level 8:** Virtually all DVD software can be played back.
- **Level 1:** DVD software for adults cannot be played back.
- Select from level 1 to level 8. The limitation will be more severe as the level number decreases.

3 Press **▲** or **▼** to select "Password".

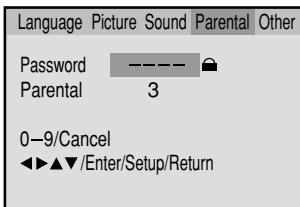
Press **number buttons (0~9)** to input a 4-digit password. Be sure to remember this number!

- If you input a wrong number, press **CANCEL**.



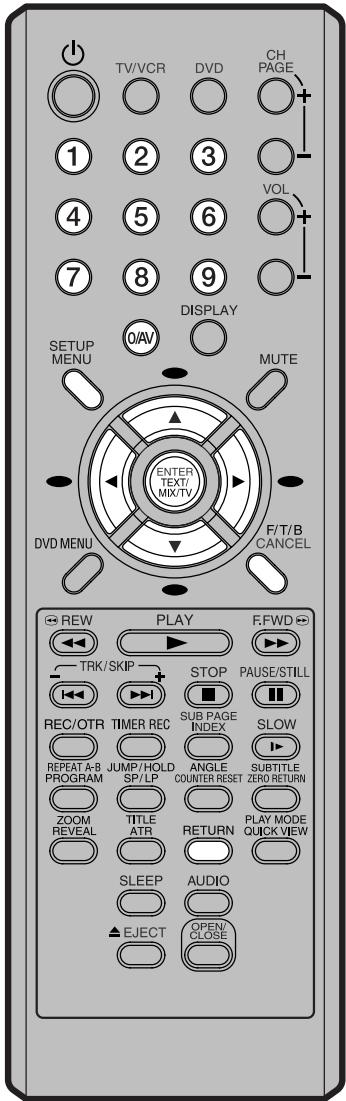
4 Press **ENTER** to store the password.

**NOTE:** Now the rating is locked and the setting cannot be changed unless you enter the correct password.



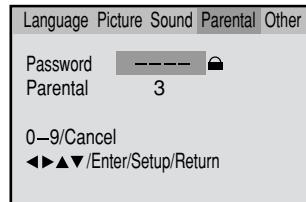
5 Press **SETUP** or **RETURN** to remove the Menu screen.

# TO CHANGE THE PARENTAL LEVEL



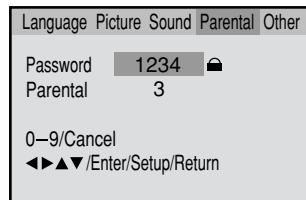
1 Press **SETUP** in the stop mode or No Disc.

Press **◀** or **▶** to select "Parental". Then press **▼** or **ENTER**.

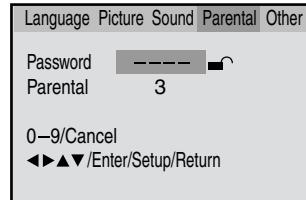


2 Press **number buttons (0-9)** to enter the password you have stored.

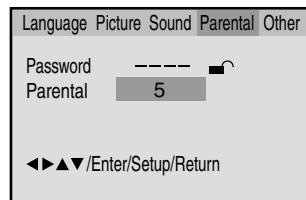
- If you input a wrong number, press **CANCEL**.



3 Press **ENTER**.  
The rating is now unlocked.

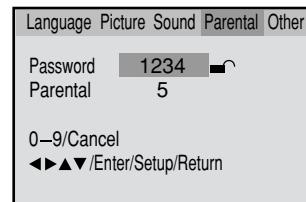


4 Press **▲** or **▼** to select "Parental", then press **◀** or **▶** to change the parental level.

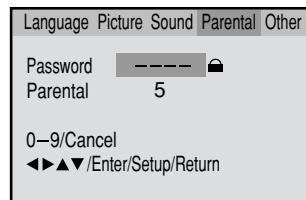


5 Press **▲** or **▼** to select "Password", then press **number buttons (0-9)** to enter the password.

**NOTE:** You can change the password at this time if you want.



6 Press **ENTER**.  
The parental level is changed and locked.



7 Press **SETUP** or **RETURN** to remove the Menu screen.

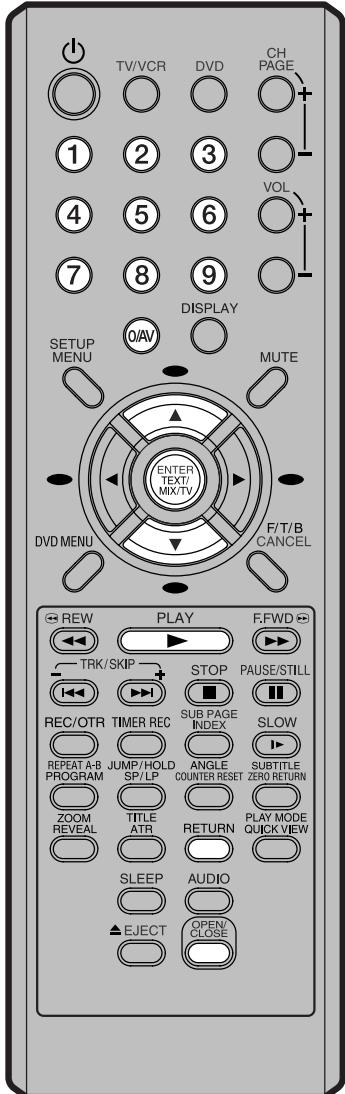
## NOTE:

If you forget the password, you can reset the code as follows;

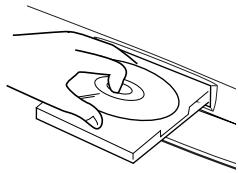
Press and hold the Stop button on the front panel, then press and hold the number 7 button on the remote control at the same time. The On-Screen display will show "PASSWORD CLEAR". You can now set a new password.

## TEMPORARY DISABLING OF RATING LEVEL BY DVD DISC

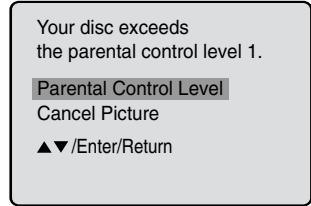
Depending on the DVD disc, the disc may try to temporarily cancel the rating level that you have set. It is up to you to decide whether to cancel the rating level or not.



1 Load a DVD disc and press **PLAY** or **OPEN/CLOSE** (see page 39).



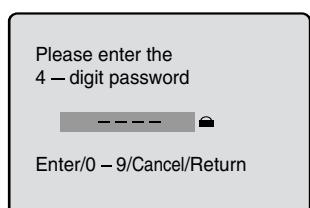
2 If the DVD disc has been designed to temporarily cancel the Rating level, the screen which follows the "Reading" screen will change, depending on which disc is played. If you select "YES" with **ENTER** key, "Your disc exceeds the parental control level 1." (e.g.) screen will then appear.



3 If you wish to cancel the set rating level temporarily, select "Parental Control Level" with **▲** or **▼**, then press **ENTER**. If the 4-digit password at step 3 on page 52 has been set, the password entering screen will appear as shown in step 4 below. Alternatively, if the password has not been set, playback will commence. If you don't know (or have forgotten) the password, select "Cancel Picture".

The setting screen will disappear. Press **OPEN/CLOSE** to remove the disc.

4 Enter the password with **Number buttons (0-9)**. Then press **ENTER**.



If you interrupt the entering, press **RETURN**.

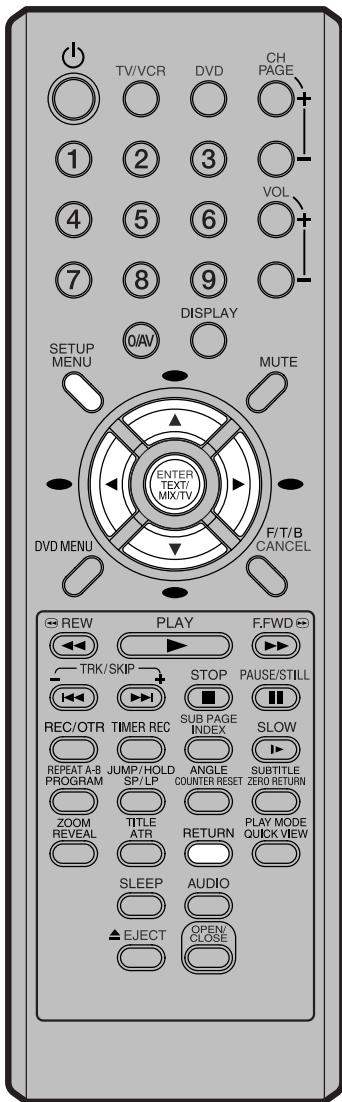
5 Playback will commence if the entered password was correct.

### NOTE:

This temporary cancellation of rating level will be kept until the disc is ejected. When the disc is ejected, the original rating level will be set again automatically.

# SETTING MENU LANGUAGE

You can select the language of the disc menu messages of DVDs.



1 Press **SETUP** in the stop mode.  
Press **◀** or **▶** to select "Language".

Language	Picture	Sound	Parental	Other
◀▶▲▼/Enter/Setup/Return				

2 Press **▼** or **ENTER**.  
Then press **▲** or **▼** to select "Menu".

Language	Picture	Sound	Parental	Other
Menu	English			
Subtitle	Automatic			
Audio	English			

3 Press **▶** or **ENTER**.  
Press **▲** or **▼** to select your desired language, then press **ENTER**.

Language	Picture	Sound	Parental	Other
Menu	English		English	
Subtitle	Automatic		Francais	
Audio	English		Espanol	
			Deutsch	
			Italiano	
			Other	

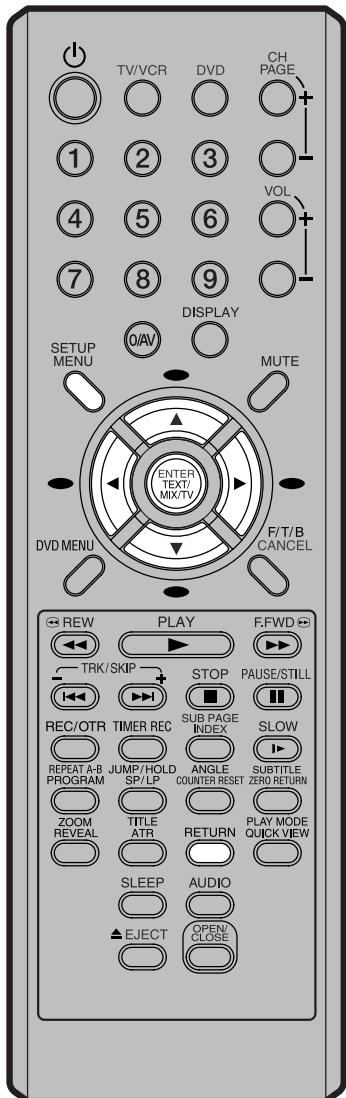
**English, Francais, Espanol, Deutsch, Italiano:**  
The selected language is the first-priority Menu language.

**Other:**  
Other languages can be selected (See the Language code list on page 58).

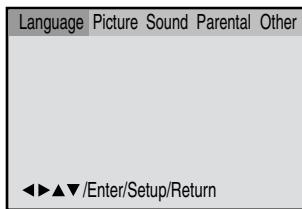
4 Press **SETUP** or **RETURN** to remove the Menu screen.

# SETTING SUBTITLE LANGUAGE

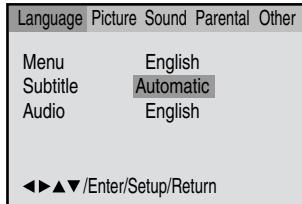
The same subtitle language can always be selected even if you replace the disc or turn the power off.



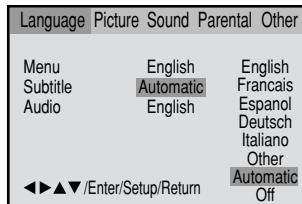
1 Press **SETUP** in the stop mode. Press **◀** or **▶** to select "Language".



2 Press **▼** or **ENTER**. Then press **▲** or **▼** to select "Subtitle".



3 Press **▶** or **ENTER**. Press **▲** or **▼** to select your desired language, then press **ENTER**.



**English, Francais, Espanol, Deutsch, Italiano:**  
The subtitle is displayed with the selected language if it is recorded on the disc.

## Other:

If you want to select another language, enter the language code (See the Language code list on page 58).

## Automatic:

- The unit will automatically select the same language in the **AUDIO** setting.
- When the unit selects the same language as the **AUDIO**, the subtitles will not appear during playback.
- When you do not use the same language as the **AUDIO**, the subtitles will appear during playback.

## Off:

Subtitles do not appear.

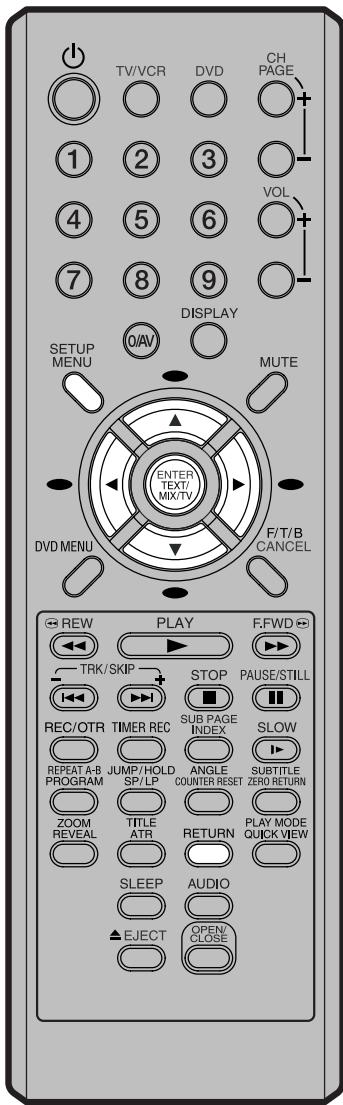
4 Press **SETUP** or **RETURN** to remove the Menu screen.

## NOTE:

If the selected language is not recorded on the disc, the first-priority language is selected.

# SETTING AUDIO SOUNDTRACK LANGUAGE

The same audio soundtrack language can always be selected by your unit even if you replace the disc or turn the power off.



1 Press **SETUP** in the stop mode.  
Press **◀** or **▶** to select "Language".

Language	Picture	Sound	Parental	Other

**◀▶▲▼/Enter/Setup/Return**

2 Press **▼** or **ENTER**.  
Then press **▲** or **▼** to select "Audio".

Language	Picture	Sound	Parental	Other
Menu	English			
Subtitle	Automatic			
Audio	English			

**◀▶▲▼/Enter/Setup/Return**

3 Press **▶** or **ENTER**.  
Press **▲** or **▼** to select your desired Audio Language, then press **ENTER**.

Language	Picture	Sound	Parental	Other
Menu	English			English
Subtitle	Automatic			Francais
Audio	English			Espanol
				Deutsch
				Italiano
				Other
				Original

**◀▶▲▼/Enter/Setup/Return**

**English, Francais, Espanol, Deutsch, Italiano:**  
The language you have selected will play if it is recorded on the disc.

**Other:**

If you want to select another language, enter the language code (See the Language code list on page 58).

**Original:**

The unit will select the first priority language of each disc.

4 Press **SETUP** or **RETURN** to remove the Menu screen.

**NOTE:**

If the selected language is not recorded on the disc, the original language will be heard.

## LANGUAGE CODE LIST

Enter the appropriate code number for the initial settings “AUDIO”, “SUBTITLE” and/or “MENU LANGUAGE” (see pages 55–57).

Language Name Code	Language Name Code	Language Name Code	Language Name Code
Abkhazian 1112	Fiji 1620	Lingala 2224	Singhalese 2919
Afar 1111	Finnish 1619	Lithuanian 2230	Slovak 2921
Afrikaans 1116	French 1628	Macedonian 2321	Slovenian 2922
Albanian 2927	Frisian 1635	Malagasy 2317	Somali 2925
Amharic 1123	Galician 1722	Malay 2329	Spanish 1529
Arabic 1128	Georgian 2111	Malayalam 2322	Sundanese 2931
Armenian 1835	German 1415	Maltese 2330	Swahili 2933
Assamese 1129	Greek 1522	Maori 2319	Swedish 2932
Aymara 1135	Greenlandic 2122	Marathi 2328	Tagalog 3022
Azerbaijani 1136	Guarani 1724	Moldavian 2325	Tajik 3017
Bashkir 1211	Gujarati 1731	Mongolian 2324	Tamil 3011
Basque 1531	Hausa 1811	Nauru 2411	Tatar 3030
Bengali; Bangla 1224	Hebrew 1933	Nepali 2415	Telugu 3015
Bhutani 1436	Hindi 1819	Norwegian 2425	Thai 3018
Bihari 1218	Hungarian 1831	Oriya 2528	Tibetan 1225
Breton 1228	Icelandic 1929	Punjabi 2611	Tigrinya 3019
Bulgarian 1217	Indonesian 1924	Pashto, Pushto 2629	Tonga 3025
Burmese 2335	Interlingua 1911	Persian 1611	Turkish 3028
Byelorussian 1215	Irish 1711	Polish 2622	Turkmen 3021
Cambodian 2123	Italian 1930	Portuguese 2630	Twi 3033
Catalan 1311	Japanese 2011	Quechua 2731	Ukrainian 3121
Chinese 3618	Javanese 2033	Rhaeto-Romance 2823	Urdu 3128
Corsican 1325	Kannada 2124	Romanian 2825	Uzbek 3136
Croatian 1828	Kashmiri 2129	Russian 2831	Vietnamese 3219
Czech 1329	Kazakh 2121	Samoan 2923	Volapük 3225
Danish 1411	Kirghiz 2135	Sanskrit 2911	Welsh 1335
Dutch 2422	Korean 2125	Scots Gaelic 1714	Wolof 3325
English 1524	Kurdish 2131	Serbian 2928	Xhosa 3418
Esperanto 1525	Laothian 2225	Serbo-Croatian 2918	Yiddish 2019
Estonian 1530	Latin 2211	Shona 2924	Yoruba 3525
Faroese 1625	Latvian, Lettish 2232	Sindhi 2914	Zulu 3631

# BEFORE REQUESTING SERVICE

If your unit does not work properly check the following before calling a service engineer.

SYMPTOMS	CAUSE	SOLUTION	PAGE
<b>POWER</b>			
No power.	The Mains lead is not connected.	Connect Mains lead to AC outlet.	7
	Main power (ON) switch is OFF.	Set it to ON.	4
Recorder does not work even though STANDBY light is on.	TIMER REC button is ON. (TIMER REC indicator is on.)	Set it to OFF. (TIMER REC indicator is off.)	25
	Moisture condensation has formed inside recorder.	Wait for a few hours.	2
<b>TV BROADCAST RECEPTION</b>			
No picture, no sound.	The Mains lead is disconnected.	Connect the Mains lead to the AC outlet.	7
	Antenna connector is not connected or wires are broken.	Check antenna connections or broken wires.	7
	Sub Power (↓) button is off.	Press the Sub Power (↓) button.	4
	Possibly station trouble.	Try another channel.	15
Sound OK, poor picture.	Possibly station trouble.	Try another channel.	15
	Antenna connector is not connected or wires are broken.	Check antenna connections or broken wires.	7
	Possibly local interference.	Move the antenna away from the source of interference.	31
Picture OK, poor sound.	Possibly station trouble.	Try another channel.	15
	Possibly local interference.	Move the antenna away from the source of interference.	31
	Volume control set at minimum position.	Increase VOLUME control.	15
Poor reception.	Antenna connector is not connected or wires are broken.	Check antenna connections or broken wires.	7
	Possibly station trouble.	Try another channel.	15
Poor colour or no colour.	Antenna connector is not connected or wires are broken.	Check antenna connections or broken wires.	7
	Possibly station trouble.	Try another channel.	15
	Possibly local interference.	Move the antenna away from the source of interference.	31
	Colour control is not adjusted.	Adjust the colour settings.	17
<b>VCR</b>			
Recording does not work.	Protection tab on the cassette tape has been removed.	Place an adhesive tape over the gap.	20
Playback sound OK but snowy picture.	Video heads are dirty.	Clean the video heads.	31
Timer recording does not work.	Main power (ON) switch is OFF.	Set main power to ON.	4
	Clock is not set.	Set the clock.	11
	START/END time is not set correctly.	Set the START/END time correctly.	25
	TIMER REC button is OFF.	Set the TIMER REC button to ON.	25
	Present time is not set correctly.	Set the present time correctly.	11
	One-Touch Timer Recording (OTR) is ON.	After OTR recording, set the timer recording.	27
INDEX mark was not registered.	INDEX mark was recorded at the beginning of the tape.	Let the tape run for a couple of seconds before recording the first INDEX mark.	30
Noise bars on screen.	Tracking is not adjusted.	Adjust the TRACKING control.	22
	Video heads are dirty.	Clean the video heads.	31
	The tape is worn or damaged.	Try another tape.	—
Can not locate INDEX mark.	The tape is worn or damaged.	Try another tape.	—
<b>DVD</b>			
The playback picture has occasional distortion.	The disc is dirty.	Eject the disc and clean it.	36
	It is in fast forward or fast reverse playback.	Some times a small amount of picture distortion may appear. This is not a malfunction.	—

# BEFORE REQUESTING SERVICE

# (CONTINUED)

SYMPTOMS	CAUSE	SOLUTION	PAGE
<b>DVD</b>			
The unit does not start playback.	No disc is inserted.	Insert a disc.	39
	An unplayable disc is inserted.	Insert a playable disc (Check the disc type and colour system).	36
	The disc is placed upside down.	Place the disc with the playback side down.	39
	The disc is not placed within the guide.	Place the disc correctly inside the guide on the disc tray.	39
	The disc is dirty.	Clean the disc.	36
	The parental lock function is set.	Cancel the parental lock function or change the parental lock level.	52,53
Playback does not follow the course of the disc's program.	It is in the mode of repeat playback, memory playback, etc.	These operations may prevent a proper progress of the contents.	—
 appears on the screen.	The function is prohibited with the unit or the disc.	—	39
<b>REMOTE CONTROL</b>			
Remote control does not work.	It is not aimed at the remote sensor.	Aim it at the remote control sensor.	6
	Distance too far or there is too much light in the room.	Operate within 5 metres and reduce the light of the room.	6
	Obstacle in the path of beam.	Clear the path of the beam.	6
	Batteries are weak.	Replace batteries.	6
	Polarities of the batteries, + or —, are not inserted correctly.	Install batteries correctly.	6

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# SPECIFICATIONS

<b>TELEVISION</b>	
Picture Tube:	21" (51 cm "V") measured diagonally
Television System:	90 degree deflection CCIR 625 Lines 50 Fields PAL/SECAM
Tuner:	Electronic Tuner
Receiving Channels:	VHF: 0-S41 UHF: 21 - 69
Antenna Input:	VHF/ UHF 75 ohm unbalanced
Audio Output Power:	1.5W+1.5W (max)
Speaker:	(4.6 x 9.9 cm 8 ohm) x 2
<b>VCR</b>	
Video Recording System:	VHS, 4 Rotary Heads Helical Scanning System Luminance: FM azimuth recording Color signal: converted sub-carrier phase shift recording
Audio Track:	1 Track
Tape Format:	12.65mm high density tape
F. FWD/REW Time at 25°C:	Approx. 1 minute 48 seconds (With E-180 Cassette Tape)
Tape Speed:	SP: 23.39 mm/s, LP: 11.69 mm/s (NTSC SP: 33.35 mm/s)
Play Back Time:	300 min.with E-300 video cassette (PAL) 210 min.with T-210 video cassette (NTSC)
Input Level:	VIDEO: 1 Vp-p, 75 Ω AUDIO: 500 mV, 50 k Ω
Output Level:	VIDEO: 1 Vp-p, 75 Ω AUDIO: 500 mV, 1 k Ω
Hi-Fi Dynamic Range:	More than 75dB
Frequency Response:	20Hz to 20,000Hz
Wow and flutter:	Less than 0.01% Wrms
<b>DVD</b>	
Signal system:	PAL
Applicable disc:	DVD (12cm, 8cm), CD (12cm, 8cm)
Frequency response:	DVD: 4Hz - 22KHz CD: 4Hz - 20KHz
S/N Ratio:	90dB
Harmonic distortion:	0.06%
Wow and flutter:	Below Measurable Level
Dynamic range:	90dB
Output:	Audio : (RCA) -12.0 dBm, 1K ohm Digital Audio : 0.5Vp-p/75 ohm
Pickup:	CD : Wavelength: 770 - 800 nm Maximum output power: 7 mW DVD : Wavelength: 645 - 660 nm Maximum output power: 5 mW
<b>GENERAL</b>	
Power Source:	AC 240V, 50Hz
Power Consumption:	80 W
Weight:	27.5 kg
Dimensions:	573 (W) x 517 (H) x 481 (D) mm
Operating Temperature:	5°C to 40°C
<b>REMOTE CONTROL UNIT</b>	
Power Supply:	DC 3V (Two batteries, AAA/ R03/ UM-4)
<b>ACCESSORIES</b>	
	Remote Control unit 2 Batteries (AAA/ R03/ UM-4) 21 pin-RCA Cable

Weight and Dimensions are approximate. Because we continually strive to improve our products we may change specifications and designs without prior notice.

**ORION ELECTRIC CO., LTD. (JAPAN)**

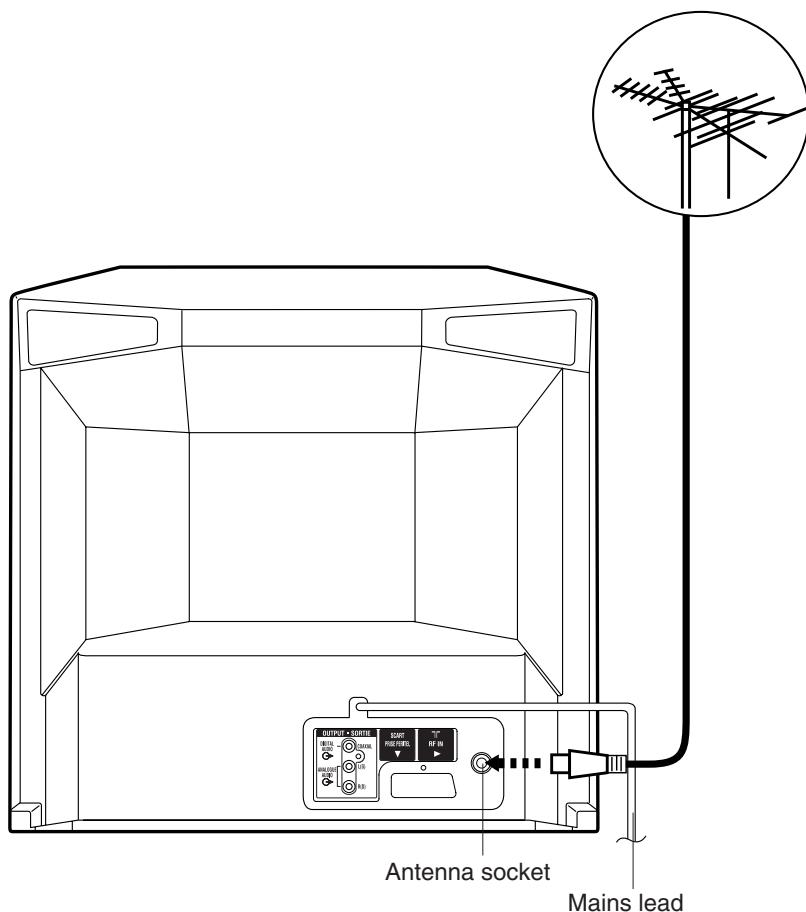


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# QUICK SET-UP GUIDE

**ORION**  
MODEL 21FVD

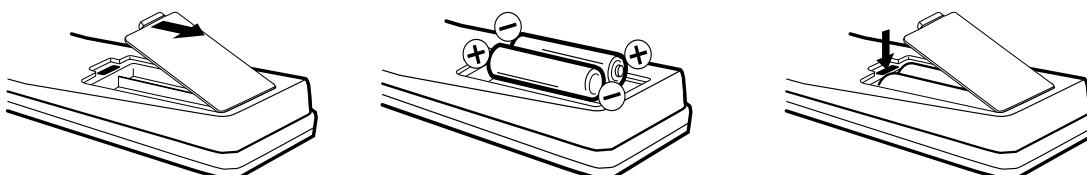
**Antenna Connections** Connect as follows.



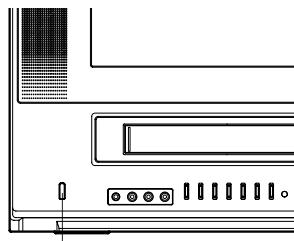
## How to install the batteries

Use micro batteries type UM-4 (AAA-Size).

- 1 Open the battery compartment cover in the direction of the arrow.
- 2 Install two "AAA" batteries paying attention to the polarity diagram in the battery compartment.
- 3 Replace the compartment cover.

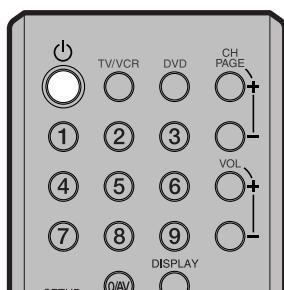


## Power On



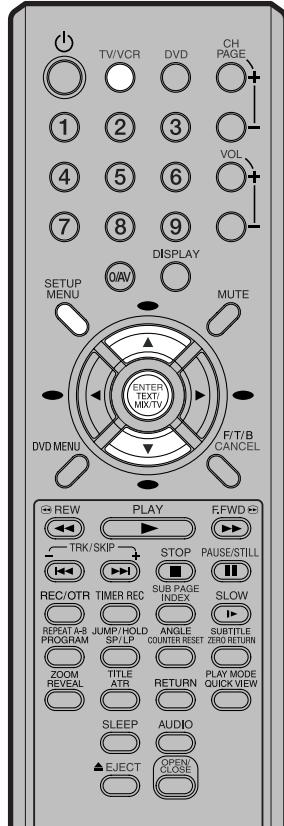
Main power (ON) switch

1 Turn on **Main power (ON) switch**. The STAND BY  $\odot$  indicator will light up.



2 Press **Sub Power ( $\odot$ )**. The  $\odot$  indicator will disappear.

## On-screen language selection



1 Press **TV/VCR** to select TV/VCR mode.

2 Press **MENU**.

If you press **MENU** for the first time, the language setting menu will appear.

3 Press  $\blacktriangle$  or  $\blacktriangledown$  to select the desired **LANGUAGE**. Then press **ENTER**.

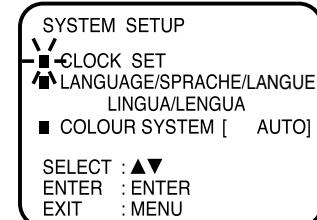


4 Press **MENU** repeatedly until the normal TV screen appears.

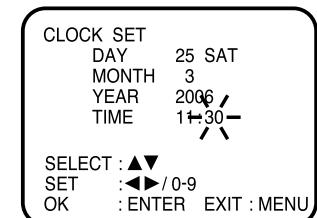
## To set the clock



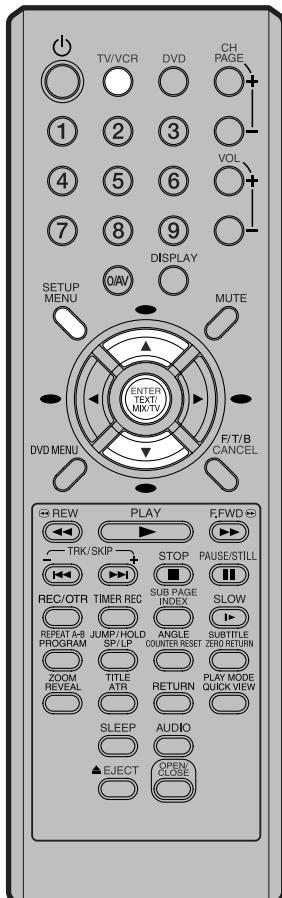
1 Press  **MENU**.  
The SYSTEM SETUP menu will appear before the clock is set.  
Press  **ENTER**.



2 Press **◀/▶** to set the **day** and press **▼** to memorize.  
Set the **month, year, hour** and **minute** in the same way above. Then press  **ENTER**.

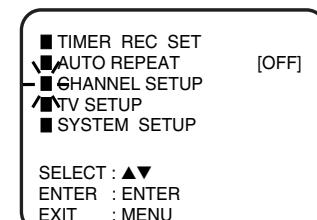


## Channel preset

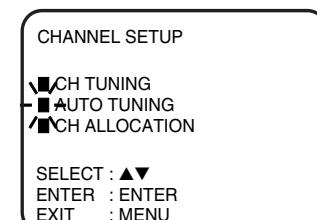


1 Press the **TV/VCR** button to select TV/VCR mode.

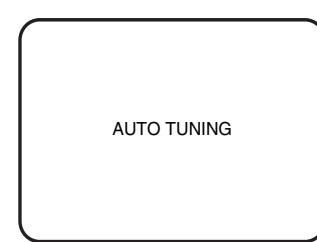
2 Press the  **MENU** button.  
Press the **▲/▼** button to select CHANNEL SETUP.  
Then press the  **ENTER** button.



3 Press the **▲/▼** button to select the AUTO TUNING.  
Then press the  **ENTER** button.



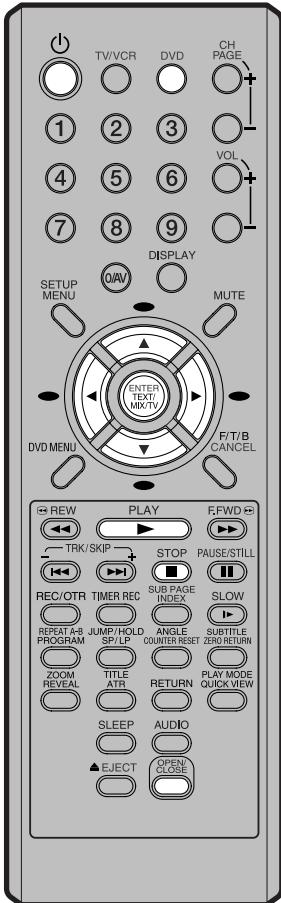
4 The Auto Tuning will start and memorize all the channels in sequence available in your area.



5 When the Auto Tuning is finished, the CHANNEL SETUP screen will appear. Then press the  **MENU** button to return to the normal screen.

## Playback procedure

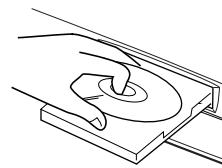
1 Press **DVD** to select the DVD mode.



2 Press **OPEN/CLOSE**.  
The disc tray will open.



3 Place a disc onto the tray.  
Hold the disc, position it with the printed label side up, align it with the guides, and place it in its proper position.



4 Press **PLAY**.  
The disc tray closes automatically.  
On the screen, **▲** changes to "Reading" and then playback will commence.  
• A menu screen may appear on the TV screen, if the disc has a menu feature. In this case, press **▲/▼/◀/▶** or **ENTER** to operate a menu feature.



Reading

5 Press **STOP** to end playback.

6 Then press **OPEN/CLOSE**.  
The disc tray opens.  
Remove the disc and press **Sub Power (↓)**.  
The disc tray closes automatically and the unit turns off.



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